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A TEXT BOOK OF
HOME NURSING

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A TEXT BOOK OF HOME NURSING

MODERN SCIENTIFIC METHODS
FOR THE CARE OF THE SICK

BY
EVELEEN HARRISON

SECOND EDITION REVISED

New York
THE MACMILLAN COMPANY
1918

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NEW EDITION

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"Ask God to give thee skill
In comfort's art —
That thou may'st consecrated be
And set apart
Unto a life of sympathy.
For heavy is the weight of ill
In every heart,
And comforters are needed much
Of Christ-like touch."

A. E. HAMILTON.

PREFACE

"Efficiency" is the keynote in the work of the world today, and no other profession is more up to date than the profession of nursing, with its efficient modern methods in the care of the sick, and the alleviation of suffering.

In this second edition of "A Textbook on Home Nursing" the author has made every effort to take advantage of the latest knowledge in the science of nursing, without losing sight of the original purpose (as indicated by the title) for which this little book was written.

The question of diet, in relation to disease, is an important study, these days; and particular emphasis is laid on the number of "calories" or "heat units" required to keep the body in proper condition, so a chapter has been devoted to the special foods that give a right balance in nourishment. A chapter of recipes for invalid cooking will also be found of value when planning the diet list.

"Outdoor treatment" in the cure of disease has proved of enormous value; so the preparation of an outdoor sleeping bed, methods of ventilation, and fresh air baths, have been described in full.

A great majority of patients nursed at home are suffering from chronic diseases, or convalescing from severe illnesses; and one chapter has been devoted to comforts and conveniences for the patient which mean so much in the life of a "shut in."

Chapters on emergencies; preparation for a surgical operation at home; care of sick children; baths, their importance and rules of procedure; contagious diseases, isolation and disinfection, etc., form part of the subject matter of the book.

PREFACE

The title of "nurse" has a larger significance since the call to arms has sounded throughout the civilized world, and highly trained nurses by the thousands have been called to the colors, overseas, under the Red Cross organization. Now as never before, the woman at home is on the alert to train for service and "carry on" in nursing as well as in other professions. There are thousands of homes throughout the land where "comforters will be needed much, of Christ-like touch" and in this great service a textbook on Home Nursing will find its place.

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A TEXT BOOK OF HOME NURSING

CHAPTER I

CHOICE AND PREPARATION OF ROOM AND BED. ATMOSPHERIC TEMPERATURE. VENTILATION

Choice of room for the patient. We hear a great deal of "proper environment" in these twentieth century days; when sickness invades the home, undermining the vitality of the body and exhausting the nervous system, nothing is more essential to quick recovery than the proper environment for our patient.

Ideals. Space, good ventilation, sunshine, and cleanliness are the ideals for a room to be used during sickness. The keynote — cheerfulness. It is not always possible to choose the most suitable room from a medical standpoint, for in a slight illness the members of the family prefer to remain in their own quarters — but in contagious diseases, chronic illness or long weeks of continual suffering, the very best room in the home is gladly given to the patient. In contagious diseases, or acute nervous troubles, a room on the top floor or in an extension close to a bathroom is to be desired; so that it may be isolated from the family and in a quiet atmosphere. Household noises that are unavoidable and not noticeable in health become a real trial in times of sickness.

Out-door porch. We are learning the value of fresh air treatment both in sickness and health; no drug can

equal it in effect; so while choosing a room for your patient, when possible, take one connecting with a small balcony or sleeping porch, or a corner room with two windows facing west and south.

Preparation of room. In preparation for the care of a patient with a contagious fever or about to undergo a surgical operation, the carpet, heavy curtains and all unnecessary furniture should be removed; but in other cases do not dismantle the room too much, for you may depress your patient with the fear of a serious illness. Space is one of our ideals, however, and the majority of rooms are overcrowded with furniture; so, many articles may be removed (especially when the room is small). The essentials are — bed, bureau, two small tables, two or three comfortable chairs (rocking chairs irritate sick people), and a sofa or lounging chair. In addition dainty muslin curtains, a few restful pictures and books, with plenty of fresh flowers, will help to create the atmosphere of a "proper environment."

The bed. Of supreme importance to both patient and nurse is the bed. Rest in bed for the patient is impossible unless the bed is comfortable, and the Home Nurse, who has frequently many other duties to perform, and in chronic cases has to look forward to a long period of nursing, should be eased of every possible annoyance. Of course, a simple, iron, hospital bed, two and a half feet from the floor to the top of the mattress is our ideal — but, again, in short cases of illness the patient prefers her own bed, and it is not necessary to change. When the illness extends over a few days, a single iron bed may be transferred from some other room; and, for the nurse's comfort (when the bed is low), raise the four legs on blocks of wood, or use two mattresses, so that the faithful Home Nurse may not suffer from back-ache.

The mattress. A firm hair mattress is necessary. Should a hollow be found in the middle (most mattresses

become depressed in spirit after much service), two flat pillows under the mattress, or a heavy, folded blanket will make it comfortable. Perhaps the mattress may be lumpy with age, in unexpected places; then stretch a blanket folded lengthwise over the mattress, under the lower sheet, and the hillocks of hardness will disappear. Always turn a mattress from top to bottom. When turned from side to side, the same part of the mattress will again bear the heaviest part of the body and will soon develop a hollow space.

Bedclothes. Sheets: cotton, not linen, are best, and three will be needed; upper, lower, and draw sheet (so called because it may be drawn from one side of the bed to the other when it gets warm, and will thus make a cool spot for the feverish body).

Rubber sheeting: about ¾ of a yard wide so that it will reach from the pillow, down to the knees; and long enough to tuck well in on both sides.

Blankets: the number of blankets must be regulated by the need of the patient and the temperature of the room; one or two during the day, but extra ones should always be on hand at night, and within easy reach of the patient, so that the Home Nurse may not be disturbed unnecessarily.

Spread: heavy, white spreads are out of place during illness. A thin, dimity spread or even a clean white sheet gives no extra weight and is easily laundered.

Making the bed. First the under sheet is put on perfectly straight to avoid wrinkles (which sometimes lead to pressure sores), well tucked in at top and sides. When your patient is restless, or very heavy, pin the sheet at the four corners with safety pins. Next comes the piece of rubber sheeting; then the draw sheet folded lengthwise, placed over the rubber sheeting pulled tightly and well tucked in under both sides. When tucking in sheets, commence in the center and then tuck towards the foot and

head of the bed. The great advantage of a draw sheet is that it may be changed as often as necessary without much disturbance of the patient, and it serves to keep the under sheet clean for a longer period. The top sheet is then put on, with the hem wrong side up, so that the right side will turn up over the blanket; leave a good margin to cover the blanket at top (most people dislike the feel of a blanket near their face), and plenty to tuck in well at the foot. Have you ever examined a well made hospital bed, with its immaculately tucked in corners? Try to copy it with your home bed, following these directions:

After putting on the top sheet, tuck it in first at the foot, then fold the corners back like an envelope, and tuck in the folded parts and the sides under the mattress. The blankets are put on in the same way. The spread, after being folded back over the bed, envelope fashion, and the folds tucked in, the ends on both sides are allowed to hang down over the sides of the bed. Of the greatest importance — do not tuck in the sides and bottom of the bedclothes so tightly that your patient's feet will be imprisoned. We love to see a neat bed, but our patient's comfort must come first.

In bed making the three points of special interest to the patient are — cleanliness, absence of wrinkles, and no crumbs after meals. We have learned how to make a bed without wrinkles, but, to keep it so, pull the draw sheet tight and tuck it in firmly two or three times during the day. Crumbs may be brushed out with a whisk broom after every meal. Should fresh linen be at a premium; the pillow cases changed at night and hung out to air will serve a second day — and the upper sheet well aired and folded may be used as a draw sheet.

Pillows. Is there anything so comforting during illness as an extra pillow tucked under a tired, aching back, between weak knees, supporting an aching arm or leg, or holding the weight of the bedclothes from touching sensi-

tive parts of the body? Pillows — small and big, fat and thin, square and oblong — the Home Nurse will find of infinite value, especially in long, chronic cases. And these extra pillows are so easily made (as we are making the ambulance pillows for the soldiers) by cutting up in very small pieces soft old cotton, linen or flannelette, or using cotton batting broken up in tiny pieces and covering it with cheese-cloth or odd scraps of cretonne. Hair pillows are excellent when a firm support is needed for elevating legs and feet as in cases of phlebitis, etc. In fever cases when the head is very warm, the pillows should be turned frequently, as they soon get hot and uncomfortable, and they also need a good shaking occasionally, which, however, must not be done on the bed, as it jars the patient. A hair pillow will be found much cooler than feathers, when the fever is intense. One confirmed invalid makes use of no less than twenty small pillows; and by changing them around in different positions finds great rest and refreshment.

Changing the pillows. In order to raise a sick person while changing the pillows or to draw her up in bed, let her clasp her arms firmly around your neck, then place one hand well under her back, and lift gently and slowly, while with the other hand you slip out the soiled pillow and put in the clean one. When the patient is too sick to help herself, get some one to assist you, and with one person on each side of the bed, clasping each other's wrists firmly under the shoulders and back of the patient, you can raise and draw her up in bed without any strain.

Position of bed in room. Pulled out from the wall on all sides, it will allow a current of air to circulate and also helps the Home Nurse to reach her patient easily, from every direction.

Should the size of the room not permit you to turn the head of the bed away from the light; put your patient's head at the foot of the bed and protect from draughts by

a screen. This is particularly to be noted during a long, chronic illness, when the patient wishes to read or sew and requires a light from behind. At night, shade the light, or place it behind the patient's head.

Out-door sleeping bed. A celebrated doctor writes, "I am convinced there is no measure comparable in its effects on the vital centers, to fresh, live air in the open." In making a "fresh air bed" on sleeping porch, balcony or roof, for open air treatment, observe the following rules: Right over the springs spread a blanket, large enough to cover up over bottom and sides of the mattress; next the blanket, a large rubber sheet or heavy paper, extending out as far as the blanket; then the mattress, making the bed as usual. The patient in flannel under-suit, stockings and hood, with hot water bottle to feet, and only the face exposed, is well tucked in and the under blanket and rubber sheeting folded up like an envelope right over the outside of the bedclothes. Cold air cannot creep up around or through a bed made in this manner.

Screens will protect from draughts; or extra pillows may be placed at each side of the face forming the letter V. Should there be no out-door sleeping porch and your patient requires a double supply of fresh air, take out the window sashes, replace them with fine cheese-cloth. Move the bed right up beside the window (with screen to prevent draught). Use all precautions of out-door sleeping, and supply any one entering the room with extra shawl or wrap. In cases of pneumonia, fresh air treatment may be thus given at home, with splendid results. The nurse in charge must, of course, be dressed for out-doors.

Changing sheets with a patient in bed. With regard to changing the sheets on a bed when the patient is in it, you may easily manage after a little practice. Have the clean sheets ready, well aired and warmed, and shut the door and windows, so that the room may be comfortable. Turn the patient over on one side, away from you,

fold the soiled sheet tightly in flat folds, close up to the patient. Lay the clean sheet on the side of the bed near you, half of it folded up against the roll of the soiled sheet, so that they can both be slipped under the body at the same time. Tuck in the clean sheet on that side of the bed, then cross to the other side, turn your patient back on the opposite side, gently pull out the soiled sheet from underneath, and afterward draw the folds of the clean one. Pull straight, firmly, and tuck in neatly. It is quite easy in this way to change the draw sheet, rubber sheeting, and under sheet all at the same time. To change the upper sheet without exposing your patient, loosen all the clothes at the foot of the bed, and spread the clean sheet and blanket on top of the other bedclothes. Then with one hand hold the clean sheet and blanket up to the neck of your patient and with the other slip down the soiled clothes underneath right over the foot of the bed; tuck in the fresh bedclothes and put on the counterpane. All this may be accomplished in almost as short a time as it takes to tell it, and without any special fatigue to the invalid. Sitting on the side of the bed or leaning heavily against it, while working over your patient should be avoided, as it is very trying to a nervous patient.

Nightgowns. It is always most refreshing to keep on hand two nightgowns or pajamas and undervests (if they are worn), one for day duty and the other for night, changing the last thing at night and after the morning bath. It may be possible to have a clean nightgown or pajamas every day, but if not this change will be very delightful, and it will be found restful as well as refreshing to change the clothes that have been worn for twelve hours. Another consideration is that the gowns are kept cleaner, and thus the washing, always a serious item in sickness, is much lightened. For long illnesses, gowns open all the way down the back are much to be preferred.

To change the nightgown: Have your patient lie on

her back, with knees bent up. Raise her slightly, and pull the gown up from under the back as far as the neck. Then slip one hand through the upper armhole of the sleeve, bend her elbow, while with the other hand you draw off the sleeve, slip the gown over the head and off the other arm. Should there be an injured arm, or one stiff with rheumatism, neuritis, etc., always remove the sleeve from the well arm first, but when you put on a clean gown, put the sleeve on the injured arm first. When putting on the clean nightgown, one arm is first drawn into the sleeve, the gown then pulled over the head, then the other arm is slipped into the sleeve, and the gown pulled down under the back.

Support for bedclothes. If any part of the body is injured and unable to bear the weight of the bedclothes, you can manufacture a support to take the place of the iron cradles used in hospitals. Two or three barrel hoops will answer the purpose, or a round band-box large enough to slip the injured limb through. Sometimes pillows laid on each side of the bed will answer as well by keeping the clothes a couple of inches from the sensitive part of the body.

Bed-rests. Bed-rests, which are of such great service when the patient first sits up in bed, are not as a rule on hand in private houses. But one may easily be contrived from a chair with the legs turned upward on the bed, when the long sloping back will form a capital support for pillows piled in one behind another to the top. Then if you put a small pillow under the knees, to prevent the body from slipping down in the bed, your patient will be made very comfortable.

Changing position of helpless patient. This can be accomplished when the bed is a double one by keeping one side for the day and the other for night. You can easily move your patient by loosening all covers at ends and sides, and drawing her over on a sheet (if she is too feeble

to roll over alone); it is almost as restful for your patient as being moved on to a fresh bed. Should there be two small beds in the room, the same change can be made by putting a large sheet across the two beds and allowing the patient to roll over, or draw her with the sheet. When the illness extends over a few weeks, the change from one bed to another will be of the greatest rest and comfort to the sufferer.

Light. Sunlight is one of our ideals in a room for the sick. Should the windows have to be darkened, at the beginning of an illness, gradually draw up the shades a little higher every day, for sunlight is a great purifier and healer, and during convalescence a "sun bath" brings new strength.

Temperature of room. The atmospheric temperature of the room will be regulated by the doctor. Between 65° and 70° F. is usual, except in special cases. In these days of modern heating, various kinds of stoves may be used to supplement the regular heat of the house during very cold weather, for an even temperature is always desired in illness. Hang your thermometer near the middle of the room, some distance from window and fireplace, so that an exact record may be kept. Whenever extra heating is used (oil or gas stove) a kettle of hot water in the room will moisten the atmosphere.

In the early morning hours, between three and five o'clock, the atmosphere is colder than during any other part of the day, and as the vitality of the body is always lower at that time, care must be taken to have extra blankets on hand for the invalid, and if necessary give a hot drink and apply a hot water bag to the feet. A small blanket folded under and over the feet between the sheets, for elderly people, gives them great comfort during the night.

Fireplaces. Open fireplaces are delightful in a sick room, for beside their bright, cheery appearance, and the

heat they give forth, they are a great help in regard to ventilation. Coal may be renewed at any time without disturbing your patient, by carrying it in, wrapped in a newspaper, and placing paper and coal together on the fire. A poker made from a piece of wood will cause no noise, and will be found quite as useful as one of iron or brass. In summer time, when there is no need of fire, a lighted candle or a lamp placed in the fireplace will have the same effect as a fire in the way of ventilation, by causing a draught up the chimney.

Ventilation. Fresh air and health go hand in hand, therefore a plentiful supply of fresh air night and day, is our ideal in sickness. Even when food, nursing and medicine have been almost unattainable, sick soldiers cared for in tents during war time, have made wonderful recoveries. They have had an unlimited amount of fresh air and sunshine. Open air treatment for fever cases, is universally adopted, and with success; hence the value of a veranda or sleeping porch connecting with the sick room. Even in slight illness, or chronic sickness, the Home Nurse should make proper ventilation her first consideration and cultivate the habit of noticing closely, when entering her patient's room, the condition of the air, odor, heat, draughts, etc. It is a real reproach to a nurse, should the doctor remark that the " room feels close."

Respiration and perspiration are two of the principal causes of impurities in a sick room. Oxygen is continually taken from the air in the act of inspiration; and the temperature and humidity of the air are greatly increased by expiration. Even when in good health, headaches and lassitude soon result when one is in an overcrowded room for any length of time. Nearly two quarts of water leave the body daily in perspiration, and passing into the air add to its humidity. In sickness, even more fresh air is required to tone up the body tissues than in health, and

may be provided, in the coldest weather, without draughts.

Take into consideration the size of the room, the number and position of the windows. If there are two windows at opposite sides of the room, open one at the top, the other at the bottom (even one inch in very cold weather), placing a piece of cardboard, or thin strip of wood, six inches wide, over, but a little away from the opening at the bottom. Then the air will not blow directly into the room, but will be guided in an upward direction. Hot air ascends, and cold air descends, so the impure air will escape through the top and the fresh air enter at the bottom. If there is only one window in a room, open at the top and bottom, but it will be necessary to flush out the air of the room, at intervals.

In bronchial cases (especially with children), a breath of out-door air causes paroxysms of coughing, so one must ventilate through an adjoining room, either by filling the room with fresh air, allowing it to warm, and then opening the door into the sick room; or by leaving a window open top and bottom in an adjoining room with a screen at the door. Open the window for a few minutes, morning and evening, covering your patient carefully about head and shoulders, but leaving the mouth and nose exposed. Opening the window for a minute before meals, will stimulate a poor appetite.

In cases of high fever, it is almost impossible for a patient to catch cold; and cold, clean air will hasten the recovery.

Open air treatment for pneumonia has proved its place in the medical world, leading always, to stronger heart action and quick recovery.

Electric fans are excellent to keep air circulating; and electric lights give out no impurities, such as come from gas or lamp light.

We have overcome the harmful opinion about night air,

and now appreciate the fact that it is even cleaner and purer than during the day, and that open windows at night are an absolute necessity.

An unpleasant odor in the room will soon disappear if a towel or newspaper is waved gently while the window is open, and during summer this also cools and refreshes a hot room.

SUMMARY

Choice of room.

Proper environment.
Ideals — space.
Good ventilation.
Sunshine.
Cleanliness.
Keynote — cheerfulness.
Room on top floor or extension preferred.
Near bathroom.
Quiet atmosphere.
Out-door porch when possible.
Importance of out-door treatment.

Preparation of room.

In contagious diseases and surgical operations.
Stripped of unnecessary furniture.
Essentials required.

The bed.

Hospital type best.
Comfort of patient and nurse.
Two ways of raising bed.
Mattress.
How to turn mattress.

Bedclothes required.

Sheets.

Rubber sheeting.
Blankets.
Spread.

Making the bed.

Care about wrinkles.
Advantage of draw sheet.
How to tuck in corners.
Three points of interest to patient: cleanliness, absence of wrinkles, and no crumbs after meals.
How fresh linen may be saved.

Pillows.

Their use.
How to make extra pillows.
Comfort of shaking up and re-arrangement.
How to change with very sick patient.

Position of bed in room.

To allow air circulation.
To have proper light for patient's eyes.

Out-door sleeping bed.

Importance of fresh air.
How to make the bed.
Blanket and rubber sheet under mattress.
Patient's costume.
Screens or pillows to protect from draughts.
When no sleeping porch — adapt a room.
Nurse dressed for out-doors.

Changing sheets with a patient in bed.

Clean sheets on hand.
Room warm.
Under sheet first.
Upper sheet without exposing patient.

Nightgowns.
Two on hand.
How to change with sick patient.

Support for bedclothes.
Making one in an emergency.

Bed-rest.
Made with a chair.

Changing position of helpless patient.
Drawing on sheet from one side of bed to the other.
Changing from one bed to another.

Light.
Importance of sunlight.

Temperature of room.
68° F. to 70° F. usual.
65° F. in fever cases.
Thermometer to be consulted.
Care during early hours when temperature is low.

Fireplaces.
Coal put on without noise.
Lamps or candles used in summer, to create a draught.

Ventilation.
Fresh air.
Open air treatment for fever cases.
Home Nurse's duty to detect bad air.
Causes of impurities in air of room.
How to ventilate with one or two windows.
Guarding from draughts.
Opening windows to flush out room.
Benefit in night air.
To get rid of odors.

CHAPTER II

COMFORTS FOR THE PATIENT

During an illness rest of mind is necessary to assure rest of body. We realize how small trials and worries oppress us out of all proportion to their importance, when we are physically or mentally tired, at the end of a day's work. Add to this the pain and weakness of real sickness and the "little things that chafe and fret" will appear as immovable mountains in the eyes of your patient.

Household worries are difficult to keep out of the sick room, especially if your patient happens to be the mother of the family: but some simple suggestions may well be carried out to retain the quiet comfort of her mind as well as body. Never whisper in or near the sick room, even when your patient appears to be asleep; it irritates, and often alarms the invalid. Banging doors, and rattling windows must be guarded against especially in nervous cases; also, oil the hinges of doors and windows so that they will not squeak when opened or closed.

Sitting on the bed, or leaning against it, often jars the nerves; and talking in a loud voice, clattering dishes, or moving heavy furniture should be absolutely forbidden.

Changing of position. Bed patients tire quickly of their position, and especially when they are unable to move themselves. We have spoken of the comfort of pillows and pads, to tuck in around and under the body and relieve the strain. Hot water bottles, partially filled, often relieve local pain; pillows (folded, and tied firmly together) under the knees will relax the muscles of the abdomen. Hair pillows or sand bags will be of great

comfort in elevating the legs in neuritis or rheumatism, but must extend the whole length of the leg, gradually rising higher towards the foot.

Rubber air rings are invaluable to relieve pressure on the lower part of the spine, and to prevent bed sores.

Pressure sores and bed sores. Our Home Nurse will have to be on the alert to guard against bed sores caused by pressure. Even in a short illness, with very sensitive skin and when pressure is continued without change of position, a bed sore may develop. In long chronic illnesses (cases which so often fall under the care of the Home Nurse), especially in old age, when the vitality is low, with very thin or very heavy people, and in high fever cases — the greatest care is called for; because once the skin is broken, the healing involves a long, painful process.

Location of bed sores: When the bony parts of the human body such as — elbows, shoulder-blades, back of the head and heels; also the buttocks, are pressed for a long period against the bed, pressure sores may develop.

Causes: Lack of cleanliness, wrinkles in bed, gown or sheets, crumbs, moisture in the bed (from perspiration or incontinence of urine) and lying in one position for many hours, are the predisposing causes of bed sores.

Prevention: It is far easier to prevent bed sores than to cure them, especially in paralytic cases and with elderly people. The first symptoms are a redness of the skin with a pricking, burning sensation. Bathe the parts with hot water and soap, at least three times in the day; then rub with alcohol, and powder to remove all moisture. Watch for crumbs after meals, and pin the draw sheet at the four corners under the mattress to keep it absolutely free from wrinkles. Persuade your patient to turn over in different positions frequently; or, when she is helpless, relieve the pressure by the judicious use of rubber rings, pillows, air cushions, pads, etc. A word about rubber rings —

when you blow them up, only allow enough air to keep the sore part of the body from touching the bed. If you make them full of air, hard and firm, they are most uncomfortable and useless. Also wind the ring with cotton gauze or old muslin, or put it into a pillow case. With unconscious patients the greatest watchfulness is necessary, if you wish to avoid bed sores. When there are involuntary evacuations, change the clothing at once, wash and powder the body. If you use a pad of oakum, on top of newspapers under your patient, it may be changed quickly and will keep the bed clean.

The Home Nurse should not take any responsibility about the treatment of bed sores, but consult the doctor at once when any sign of trouble is discovered. Do not wait until the skin breaks, for with the lowered vitality of bodily sickness it is most difficult to heal.

Care of the back. Even when there is no sign of a pressure sore, patients grow tired of lying for days on their back or sides. A few minutes' gentle rubbing of the body with alcohol will take away the restlessness; also pulling the draw sheet from side to side will cool the bed, and turning pillows or changing their position will be received with gratitude.

Bed-pans. Warm the pan always, before giving it to your patient. You can hold it under hot water, or near a fire or cover the end with a hot pad. When inserting the pan, have your patient bend her knees up, then should she be unable to raise herself, slip your hand under the lower part of her back, and raise her enough to place the pan underneath. To avoid spilling the contents, be sure to raise the back again when withdrawing the pan. Bathe your patient after using the bed-pan, with a piece of gauze and warm water; always note the contents of the pan for your report to the doctor.

Care of the mouth and teeth. The mouth is an index to the stomach, and requires frequent care during ill-

ness. Before and after meals, a simple mouth wash is most refreshing. Listerine, well diluted, or lemon juice, boric acid (2 per cent.) and albolene are good preparations. Washing the teeth after meals (especially if there is a false plate) will keep the mouth fresh. In fever cases special care of the mouth is necessary; the doctor will order a mouth wash. When your patient cannot use the mouth wash herself, take a tooth pick or flat piece of thin wood wrapped in gauze, dip it in the solution and wash gently all around the mouth and teeth. Make a number of these little mouth sticks and keep them on hand, as you will require three or four for each washing.

Care of the hair. Every woman is a bit vain about her hair, and likes to keep it in order, especially during illness.

Should your patient be a woman, a dainty boudoir cap is quite an addition to the invalid's costume and may be made most attractively to match with the little bed jacket. But a boudoir cap does not take the place of well brushed and braided hair, particularly when your patient has to lie down flat on the pillows.

Part the hair in the center, brush and comb one side at a time, beginning at the end of the hair and working gradually up to the head; hold the hair firmly in your hand and you will not pull or jerk the head. A little vaseline or alcohol will help to remove tangles. Two braids, one on each side, is most comfortable when the head has to lie flat on the pillow, but do not braid too tightly as it will make a hard knot under the ears, and this will be uncomfortable to lie on. A few minutes' gentle massaging of the head at night will soothe the nerves and induce sleep; it is also a preventive against hair falling out after an illness.

Bed jacket. A loose flannel or silk jacket, nightingale, or shoulder cape will be required, even when your patient

is lying flat down in bed, for it allows the arms to be kept out from under the bedclothes without taking cold.

Bed socks. Bed socks have solved the question of keeping a patient's feet warm; especially elderly people, and during a long illness. They are made from eider down flannel, shaped to the foot, and reaching above the ankles, easily laundered, and of great value at night, when hot water bottles grow cold.

Screens. A screen of some kind is indispensable, especially one of light weight that may be moved in a moment to protect from draughts. The Home Nurse can easily manufacture one with a clothes horse and a few yards of art muslin, cheese-cloth or unbleached muslin.

Refrigerators. A small refrigerator or ice-box will be a necessity if the illness is a long one. They are divided into compartments and will hold ice, fruit, jelly, broth, milk, etc. Think of the steps this saves for the Home Nurse, especially if the sick room is at the top of the house. Once a day a tray may be carried up with all the little extras for the twenty-four hours, and the "between meals" refreshments will be on hand cool and fresh.

Care of food or drink for the patient. During infectious fevers, all eatables for the patient may be kept in the small ice-box quite separate from the family supply. When the illness is of short duration, or if these little ice-boxes are too much of a luxury, the best way to preserve the ice is to wrap it in a piece of flannel, and place it on a bowl or cup turned upside down inside a large hand-basin. You may then place the broths, milk, or jellies in the basin resting against the ice, and cover all with a towel or table-napkin and stand the basin near an open window. For cracking the ice, miniature ice-picks may be purchased, or an ordinary pin serves to break it very nicely. When necessary to crack a large quantity of ice for an ice-bag or ice-cap, put the ice in a towel and break

it with a hammer or iron. If it is absolutely necessary to keep water or milk in the room, always have it carefully covered. Sometimes broth or milk is needed during the night, and where there is no ice on hand, you will be able to keep it cool by wrapping the pitcher or bottle in a damp towel and standing it outside the window.

Fly curtain. Unless the house is properly screened during the summer, or if your patient spends part of the time on an out-door sleeping porch or open balcony, you will need a fly-curtain. Fasten a large piece of mosquito netting to a hook in the ceiling and allow it to touch the floor on all sides of the bed.

Flowers. Plant life is an important help in purifying the air of a room. It gives out a large supply of oxygen, especially during daylight and in strong sunshine; it is one of our most active agents for air purification. Plants should be watered daily; and cut flowers re-arranged every morning. At night remove them from the sick room, and they return fresh and with new interest to your patient in daylight.

Gifts of flowers are as a rule appreciated more than anything else by our invalid friends. To some people they prove a better tonic than medicine, especially growing plants, bulbs, and bright-colored flowers, without too strong a perfume: a never failing center of interest, they recall hosts of pleasant memories.

Order in the sick room. A patient with an orderly mind will sometimes almost reach nervous prostration should the sick room remain untidy. After the daily bath is given, and the bed changed, a carpet sweeper or damp cloth over the broom will remove dust without annoyance. For a duster use a piece of cheese-cloth wrung out of hot water and dust gently without unnecessary disturbance. Soiled clothing and evacuations of course are removed at once. Bed-pans and urinals rinsed first in cold water before washing in hot water, for heat hardens the

albumin in the urine and makes it difficult to remove. For a disinfectant 2 per cent. formalin will remove all odors. Empty dishes and glasses lying around are most untidy. Medicine bottles and surgical appliances should be kept out of sight of the patient. Stains from medicines and other causes may be removed by Javelle water.

Visitors. One of the unsolved problems of the sick room is what to do about visitors. If people would only use a little common sense when visiting their sick friends, their visits would do good to the patient instead of sometimes causing trouble.

Do not allow a visitor to enter the sick-room straight from the open air on a cold or wet day. Ask him to wait in an adjoining room for a few moments until his clothes lose their dampness and become warm. Visitors should be warned to put aside all depressing news, and be as bright and cheery as possible, bringing in with them a little sunshine and news of the outside world, instead of retailing to the patient the sorrows, sickness, or death of mutual friends.

It is necessary to discriminate carefully as to whom you admit to visit the invalid, as sometimes a visit from a relative who is fussy and irritating will do your patient a great deal of harm, while a loving, sympathetic friend may have it in her power to refresh and strengthen the sufferer.

After a serious illness, when the doctor allows visitors to be seen, one friend during the day is sufficient for the first few days, and this visit should be limited to a very few minutes. At the end of the prescribed time, if the visitor has not the tact to leave, you should not hesitate to request her to do so. Unless one has been through a serious illness it is impossible to realize how exciting it is to see even a very intimate friend, after being shut out from the busy everyday world for days or weeks. A nervous patient should never be allowed to see two visitors

at the same time. It fills one with the deepest sympathy for the invalid to see two friends, seated on opposite sides of the bed, talking across at each other, while the poor sufferer lies in the middle, trying not to look distressed and tired with the effort she has to make to watch and listen to them both at the same time.

Have a chair placed facing the invalid, and near enough for her to hear what is said without an effort, and the first indication of weariness should be the signal for the immediate departure of the visitor.

Household worries of all kinds ought to be kept outside the door as far as possible, and only the bright side of life allowed to cross the threshold. It is only human nature that when we are sick little things affect and worry us, which we would scorn to notice in perfect health.

Convalescence. The convalescent period is very trying both to nurse and patient. As soon as the invalid begins to sit up every day, she will require a great deal of encouragement to brace her up, as it is then she will realize her weakness.

Sitting up. An easy chair will be required, with a sloping back, plenty of pillows (under your patient and at her back), also a second chair or foot-rest for her feet. Place the chair close to the bed, so that there may be no unnecessary steps for the patient. Arrange a blanket corner-wise over the pillows in the chair, so that it will wrap well around and over your patient.

Stockings and wrapper will be sufficient additional clothing the first time of sitting up. After these are put on, draw your patient to the edge of the bed, bend her knees over the side, slip one arm around her back, and the other under her thighs and lift her gently into the chair.

It is not wise to allow the patient to sit up long at a time; half an hour the first day will be found quite sufficient, and after the first day sitting up for a short time,

twice in the day instead of a longer period at one time, will be found far less tiring. Turn the mattress and allow the bed to air while your patient is out of it. The pleasure of being up at first is so great, that people are apt to go beyond their strength, not realizing that a reaction will come afterward, so you must insist upon the invalid returning to bed before the slightest weariness is felt. Sitting up in an easy chair is better than reclining on a sofa, as it is a complete change from the bed, and helps to restore the strength more rapidly.

After the first day or two, unless the doctor gives special directions about it, a few steps should be taken, increasing them slowly each day until the limbs have regained their strength. Some invalids lose all desire to walk, and have to be coaxed and encouraged to commence. In one case it was found necessary to put the chair a little farther from the bed each day, and insist on the patient walking to it, so that by slow degrees she was persuaded to walk across the room.

When the patient is well enough to sit up, though unable to go out of doors, you may give her a great deal of pleasure and fresh air, by wrapping her in blankets and shawls, taking care to cover the head completely, and then open wide the window and close the door to prevent draughts. Let her sit near the window or walk around the room for half an hour. This will be found almost as refreshing as a drive through the streets. After shutting the window, do not remove the extra wraps for a few minutes until the room becomes warm.

Amusements. Reading aloud is a delightful way to pass away the time, but a little tact must be exercised in selecting the books to be read, and do not tire your patient by reading too long without intermission. The strain of listening for more than an hour at a time is very tiring to the nerves. Simple little games that are not too exciting make a pleasant variety in the long day. Do not

allow the invalid to read or write for more than half an hour without resting, if the eyes are weak; as using them while in a recumbent position is likely to strain them. As soon as possible get your patient out into the open air. This can be done even before she is able to walk downstairs, by having her carried down, seated in an ordinary chair. There is great healing property in the open air — healing to both mind and body, and a drive of even fifteen minutes or half an hour in God's glorious sunshine will often do more than any medicine.

Tact. Tact is of the utmost importance in nursing the sick. Sometimes it is necessary to insist upon their doing things to which they strongly object, and it is only by gentle persuasion that they will yield. Ordering or insisting upon the fulfillment of your object will be of no avail and only excite and annoy them. During convalescence it is especially necessary to tempt the appetite with dainty dishes, nicely served. Some patients try to get well too quickly, and have to be held back, as they run the risk of having a relapse by drawing too much on their newly acquired strength.

Infinite patience is needed to put up with all their little whims and fancies. It is not always wise to keep asking an invalid what she would like, or what she wishes you to do, whether it be a drink, a pillow changed, a blind closed, a little reading, or any other attention. Do what you think best at the time, unless it is absolutely necessary to consult her, and, in nine cases out of ten, what you do will be appreciated much more than if the patient had been called upon to decide the question.

Anything in the shape of a little surprise, either something dainty to eat or drink, a few flowers, a new book or magazine, a pretty picture, or simply some cheery bright words of sympathy and comfort, will go a long way in brightening the weary days, and will bring many a gleam of sunshine into the shut-in life.

Routine of nurse's daily duties. The Home Nurse has to plan her daily routine so that the care of the invalid may be included in the "common round and daily tasks" of housekeeping, and home-making. This is especially to be observed should it develop on the "Home Mother" to assume the duties of nursing.

The order of the day (varying to meet the individual case) might run as follows:

1. Wash patient's face and hands, swab out mouth or have him clean his teeth, shake up the pillows and open wide the windows.
2. Prepare family breakfast, but serve the patient first.
3. Plan out meals for the day, tidy the house.
4. Give patient a bath (see page 44), get him up on chair or sofa (if not confined to bed), straighten up the sick room (see page 20). Give patient "between meals" nourishment, and any necessary medication.
5. Prepare dinner or lunch.
6. Serve patient's dinner first, clean away dishes.
7. Make patient comfortable, to sleep or rest for two hours.
8. Serve four o'clock nourishment.
9. Prepare evening meal; serve patient first.
10. Get ready for the night, face and hands washed, back rubbed, draw sheet and nightgown changed (see page 7). Give extra nourishment about 9 P. M.
11. See that all supplies are on hand for the night, nourishment for early morning hours, small stove, extra bedclothes, etc.
12. Always arrange for a friend or member of the family to relieve the Home Nurse for at least two hours' walk in the open air during the day. When the illness is such that constant care is required during the night, a night nurse should be engaged, so that the Home Nurse may have the uninterrupted sleep required.

SUMMARY

Comforts for the patient, mental and physical.

Rest of mind.
Avoid household worries.
Whispering.
Banging doors and rattling windows.
Oil hinges to prevent squeaking.
To be avoided:
- Sitting on bed.
- Talking in loud voice.
- Walking heavily.
- Clattering dishes.
- Moving heavy furniture.

Changing position of patient.

Comfort of pillows and pads.
Hot water bottles.
Elevating legs.
Rubber rings.

Pressure sores and bed sores.

Necessity for watchfulness.
Vitality low in long chronic illness.
When skin is broken it is difficult to heal.
Location of pressure sores.
Causes of pressure sores.
Prevention of pressure sores.
Easier to prevent than to heal.
Symptoms of bed sores.
Care of the affected parts.
Crumbs removed.
Bed free from wrinkles.
Care of rubber rings.
Moving your patient to change position.
Use appliances to relieve pressure.

How to prepare rubber rings for service.
Carefulness with involuntary evacuations.
Oakum pad.
Consult doctor at first sign of pressure sores.
Resting a tired back by rubbing.

Bed-pans.

Warm before using.
Support back of patient when inserting pan.
Bathe parts after use of pan.
Note contents of pan for doctor's record.

Care of mouth and teeth

Before and after meals.
Simple mouth wash.
Special care in cases of fever.
Doctor will prescribe mouth wash to use when patient is unable to wash her teeth.

Care of the hair.

Boudoir caps.
Well brushed hair.
How to comb and brush the hair without troubling the patient.
Vaseline or alcohol to remove tangles.
Two braids most comfortable to patient.
Massaging head at night, helpful to sleep and prevents hair falling out.

Bed jackets.

Three kinds.
Comfort in use.

Bed socks.

Especially helpful with elderly patients.

Screens.

Indispensable in sick room.
Light weight.
How to make screens at home.

Sick room refrigerators.

Necessity in long illness.
Different compartments.
Save steps of Home Nurse.
Once a day all supplies carried upstairs to refrigerator.
Refreshments on hand all the time.
During infectious diseases patient's food must be kept separate from that of family.
How to preserve ice without refrigerator.
Cracking ice for ice-bag or ice-cap.
Keeping milk, broth or water during night without refrigerator.

Fly curtain.

When screens are not available.
On out-door sleeping porches.

Flowers.

Various kinds.
Delight to patient.
Care of plants.
Plant life important as air-purifier.

Order in the sick room.

Necessary for patient.
Caring for floors, furniture, etc.
Remove soiled clothing.
Cleaning of bed-pans.
Prevention of bad odors.
Removal of empty dishes.
Medicine appliances out of sight.

Stains removed from carpet or bed.

Visitors.

Difficult problem in sickness.
Not allowed to enter with damp clothing.
No depressing news.
Number and kinds of visitors, and length of visit.

Convalescence.

Difficult period for patient and nurse.
About sitting up.
How to arrange chair and patient.
The first few steps.
Fresh air bath.
Reading aloud.
Eyes weak.
Getting out of doors.
Tempting appetite.
Tact of great importance.

Routine of nurse's daily duties.

CHAPTER III

TEMPERATURE. PULSE. RESPIRATION. THE GIVING OF MEDICINES

Temperature. The temperature of the body is a very important factor in the treatment of disease. When any part of the system is out of order, it is at once shown by a rise or fall of temperature; and if there should be a difference of more than a degree above or below the normal mark, without any apparent cause, such as sudden alarm or intense nervous excitement, you may take it as a sign that trouble is brewing somewhere.

It is not difficult to take a person's temperature, and at least one member of every family should be able to use a little clinical thermometer.

The normal temperature of the body is 98.6° F.; the normal pulse about 72 beats to the minute; and the respiration 18 breaths to the minute. These are considered the average marks, but it must be remembered that there is apt to be a slight variation above or below the average, according to the temperament of the individual. For instance, an easy-going, placid person will have a slower pulse, and frequently a lower normal temperature, than one of a nervous excitable disposition. A rise in temperature, or an increase in the pulse and respiration, is not as important in a child as in an adult.

The temperature of the body in health is always slightly higher in the evening than in the morning; about 6 P. M. it is at the highest then gradually declines until morning. Children have a higher average temperature than "grown

ups"; and in elderly people the temperature is, as a rule, on a lower average.

A temperature below 95° F. almost invariably means death, as it indicates that there is not enough heat to enable the vital organs to do their necessary work.

How to use a thermometer. Before using a clinical thermometer shake it carefully (holding the bulb end downwards), until the mercury falls below the mark 96° F.; then insert the bulb end in your patient's mouth, well under the tongue, make her close the lips firmly so that no air will enter, and leave it there for a full three minutes. Unless the lips are kept tightly closed all the time you will not get the true temperature of the body. At the end of three minutes remove the thermometer and note carefully the exact position of the mercury, that is to say, at what number on the thermometer the mercury stands.

Care of the thermometer. Before using the thermometer it is always necessary to wash the bulb in cold water, and after you have finished dip it in a little alcohol, or some disinfectant solution, to guard against any chance of infection.

In fever cases the thermometer, which is frequently used during the twenty-four hours, should be kept standing all the time in a glass containing 1:1000 bichloride of mercury, or in alcohol. A piece of cotton wool in the bottom of the glass will prevent the thermometer breaking, and it should be rinsed off in plain water and wiped with cotton, before being placed in the patient's mouth.

When to take the temperature. It is necessary to take your patient's temperature about the same hour morning and evening, so that you will be able to notice exactly any changes that may take place from day to day. Stimulating meats and drinks tend to elevate the temperature of the body, and therefore half an hour or an hour should elapse after meals before using the thermometer. Do not allow hot or cold drinks or ice to be taken for at

least fifteen or twenty minutes before using the thermometer by mouth, as it will prevent your getting the exact temperature.

Temperature by rectum. In the case of a child under four or five years of age it is almost impossible to take the temperature by mouth as it is difficult to prevent the child biting the thermometer, and impossible to make her keep her mouth closed firmly for even three minutes. The only safe way is to take it by the rectum. This is also necessary in the case of a delirious or unconscious patient, and in typhoid fever, where the temperature has to be closely watched, as the rectal temperature is considered more accurate. To take a rectal temperature, after shaking down the mercury, cover the bulb with oil or vaseline, and with the patient lying on the left side, insert the thermometer slowly and gently, about an inch and a half into the rectum, holding it there three minutes. Try and keep the child from crying, if possible, by distracting her attention, as crying would elevate the temperature. It is important to remember that a rectal temperature always registers about one degree higher than the temperature taken by mouth. When taking the rectal temperature of a child, or of an hysterical or delirious patient, do not leave them until you have withdrawn the thermometer.

Pulse. While the thermometer is being used you may at the same time take the pulse and respiration. The pulse is counted by placing the first and second finger of one hand very lightly on the inside of your patient's wrist. After pressing gently but firmly you will feel in a few seconds the steady beat of the pulse. Then time the beat by a watch, counting either by the half minute, and doubling the result, or else counting the full minute. It is always best, when taking the pulse, to go over it twice for fear of making a mistake. The pulse can be counted on other parts of the body besides the wrist, but that is the easiest and most convenient place to get it except in spe-

cial cases. Sometimes when the patient is sleeping you will be able to count the pulse in the temple better than at the wrist without disturbing her. Never try to count a pulse with your thumb, the little pulse beat that is in your own thumb will interfere with an accurate account of the pulse beat in your patient's wrist.

Points to be noted. The principal points to be noticed in taking the pulse are: the strength, frequency, and regularity of the beat. Never press too firmly against the wrist, or you will not be able to detect the pulse beat; also see that your patient's hand and arm are at rest, and not in a strained position. It is not necessary in this little book for Home Nurses to go into details about the different kinds of pulse beats and what they indicate; that can only be acquired by a great deal of practice and study, and does not come within the sphere of Home Nursing.

Change in the pulse beat. The pulse is always quicker when the patient is standing or sitting up, than when lying in bed; therefore it is more accurate to count the pulse when your patient is in the same position each day. A very slight cause will often be the means of increasing the pulse beat perceptibly, and in nervous or excitable people the pulse sometimes varies according to their feelings. The pulse of a nervous patient will jump up when there is a knock at the door, or if the doctor enters unexpectedly. When the temperature and pulse rise at the same time, and do not show any signs of going down again within a couple of hours, it is almost certain that there is trouble somewhere, and you will do well to consult the family doctor.

Respiration. If possible, count the respiration without the knowledge of your patient, because if she is conscious that you are watching her respiration, it will be impossible for her to breathe naturally. You can easily see the rise and fall of the chest with every breath, and if

not distinct enough during sleep you can feel it by placing your hand lightly on the chest. Respiration below twelve or above thirty to the minute should always be watched and reported. Temperature, pulse, and respiration will be found more accurate if you take them when your patient is lying down in a restful position instead of sitting or standing. Lying flat on the back is a great rest and refreshment to the system, and generally relaxes and soothes the nerves. A well-known physician writes that a woman should never stand when she can sit, and never sit when she can lie down. During sleep the pulse is a little slower than when awake, but with delirious people and children it is necessary to count the pulse and respiration while they sleep, as it is almost impossible to take them accurately when they are awake.

Medicines. There is much to be learned about the giving of medicines, but we will only mention a few simple rules that can easily be followed, and are necessary to all who try their hand at nursing.

Caution about medicines. All medicine bottles and boxes should be most distinctly labeled and kept carefully locked away out of the reach of children. A pathetic story is told of a child who one day told her mother gleefully that she had given baby a pretty white candy she had found in a little box, and that baby had gone to sleep immediately! On investigation the poor mother found that the child had given baby a morphine pill, and that it was impossible to save the little one's life. Another child was discovered by her mother building a little bridge with strychnine tablets she had taken from their "pretty pink box."

Rules in giving medicines. Never give a medicine of any kind, no matter how well you know the bottle, without first taking it to the light and reading the name very carefully. Some authorities go so far as to say that the label ought always to be read *twice* before giving the medi-

cine, first before pouring it out, and then again after measuring it. So many dreadful accidents have occurred from unintentional carelessness regarding this important rule, that one cannot enforce it too strongly. Another error that must be carefully guarded against is the practice of mixing solutions or lotions in various bottles and letting them stand about without any label to show what the mixture is.

When water is ordered to be mixed with the medicine, use it very cold or very hot; lukewarm water is nauseating, and is quite sufficient to upset a delicate stomach. When a powder has to be given from the paper wrapping, pour it well back on the tongue, and have a glass of ice cold water ready to drink. Oil of any kind is more easily taken when a piece of ice is first melted in the glass or spoon, and some small pieces of ice on hand to suck afterwards.

Nearly all medicines need to be well shaken before being poured out, so as to thoroughly mix the ingredients, and if you pour the medicine from the side of the bottle away from the label, you will keep the label clean and prevent its being blotted out by drops falling from the mouth of the bottle.

Always replace the cork immediately after using a bottle. All tinctures should be kept in a dark place. Some drugs change character when kept many months, so the family medicine chest should be thoroughly gone over every six months at least, and the remedies no longer needed destroyed. Pills that have been kept any length of time get so hard that they will not dissolve in the stomach, and pass out of the system without doing any good. In giving sleeping medicine wait until all is quiet for the night, and your patient comfortably arranged in bed. A hot drink given with a sleeping powder will hasten its effect.

When to give medicines. Medicines to stimulate the

appetite are given before meals, tonics generally one-half hour after meals. Laxatives are given at night, unless a very quick effect is desired when they are given before breakfast. Medicines should always be given at exactly the time ordered, not half an hour earlier or later, unless the patient is sleeping and is not to be disturbed; and about half an hour should be allowed between medicine and food. Iron and cod-liver oil are amongst the medicines given after meals, and iron must be taken through a tube if in liquid form, as it is injurious to the teeth. When a course of iron is prescribed it will, as a rule, be found very constipating, and a laxative of some kind will be needed every few days. Lemon juice taken in the mouth before and after a disagreeable dose, or chewing a crust of bread or a clove, will be of great assistance in removing the taste. You may sometimes disguise the taste of medicine altogether in food or drink of some kind when you have a delirious patient or a child who refuses to take it. When that is impossible make the dose very small by not adding much water, and compress the nostrils, when the patient will be obliged to open her mouth for breath, and you will be able to slip the medicine down her throat.

Some people find it very difficult to swallow pills. One of the easiest ways to manage is to place the pill under the tip of the tongue, instead of on top of it, take a drink of water, and the pill will disappear. If you prefer, you may crush the pill into powder and give it dry on the tongue, or roll it in jam or bread. Other people object to powders, and this may be overcome by placing the powder in a little gelatine wafer. They then slip down the throat easily. These wafers may be bought at any druggist's, and are inexpensive and useful. Another way to dispose of a powder is to dissolve it in water, and when it does not mix well, use a little glycerine first to moisten it, then add the water.

How to measure medicines. Medicines should be

measured very carefully, as with some drugs even a drop more or less will make a great difference. The graduating glass will be found the most accurate for measuring, or a glass dropper with a rubber bulb at one end, when the dose has to be measured by drops. Children need much smaller doses of medicine than adults, and the amount must be regulated according to their ages. A child three years old takes one-sixth the dose of an adult. Speaking generally, and for home remedies, one teaspoonful equals a fluid drachm, and a tablespoonful equals half an ounce.

Disguising the taste of medicines. In giving castor oil, it is very easy to disguise the taste completely. Given in orange juice to a child, it is taken with delight; half the juice is poured into a glass, then the oil, and afterward the remainder of the juice on top. The best way to mix it for an adult, is to pour one teaspoonful of whiskey, brandy, lemon juice or orange juice, in a wine glass, let it run all around the surface of the glass to wet it. Then dip the teaspoon in very hot water (so that the oil may not stick) and measure out five teaspoonfuls of oil into the wine glass, add a little more of the orange or lemon juice on top. If the patient will suck a piece of orange or lemon, immediately before and after taking the oil she will not taste it. Castor oil can also be completely disguised in soda water, with a good deal of flavoring.

Rules about prescriptions. When a prescription for medicine is given by a doctor it is always well to ask the druggist for a copy of the prescription; you will then be sure you are getting exactly what has been ordered, and if you need the medicine renewed at any time when away from home, you have the prescription to which to refer. It is also of great importance sometimes to know what you are giving or taking in the way of medicine, as drugs affect people differently. Some patients cannot stand even a small dose of certain medicines. We know of one

family, no member of which can take the smallest amount of opium in any form, without showing signs of poisoning. It is not a safe thing to prescribe drugs for your friends without a doctor's direction, except in the most simple household remedies.

A lady told me once that having found ten grains of phenacetine very helpful when she had a nervous headache, she recommended it to her sister who was suffering in a similar manner. Shortly after taking it her sister went into a state of collapse, and it was hours before she recovered from the effects. They discovered that the girl had some heart trouble entirely unknown to herself or the family, and the phenacetine proved too depressing.

When giving medicine put it into a small dainty glass, perfectly clean, with a glass of ice water, and a piece of orange or lemon on a little tray covered with a snowy napkin, and thus by making the dose look attractive, you will lighten very much the disagreeable task of taking it.

Medicines given in suppositories. Oil the suppository very thoroughly (vaseline is best) and gently push it up as far into the rectum as you can. After which, hold a napkin, or towel close pressed against the rectum, until the muscles relax, and there is no fear of the suppository being returned.

How to use eye drops. The doctor may order drops for your patient's eyes. Many people think the drops should be put in the corner of the eyes near the nose, but that is not right; to be properly absorbed all over the eyes, the drops should be dropped in the center of the eye. Hold the lower lid down with your finger, and while your patient turns her eye to the ceiling, drop the medicine under the lower lid in the center of the eye. When she blinks her eyes the medicine will go all over the eye ball, not disappear down through the nose as it would if dropped into the corner.

Medicines given by inhalation. In croup, asthma,

laryngitis, etc., the doctor may order medicines such as creosote, and tincture of benzoin, etc., to be put in boiling water and inhaled through the steam.

An ordinary pitcher may be used; heat it well with boiling water, poured over it, then fill it three quarters full of boiling water, add the medicine, fold a towel around the patient's nose and mouth and over the top of the pitcher so that she may draw in the steam and have the full effects of the drug.

How to make a croup kettle. A croup kettle, or an ordinary kitchen kettle is of great service for inhaling. You may keep it boiling by means of a little stove (gas, oil, or electricity) near your patient's bed; then make a cone of stiff paper or cardboard, covered with a towel, fit the small end over the spout of the kettle, and the large end over the patient's mouth.

Croup tents may be needed in a home when there are children. An umbrella or three-sided screen answers the purpose, an old blanket is thrown over this support to absorb the moisture, then a sheet to make it tidy; the kettle at the side or back of the bed on a little stove. Great care should be taken to guard against fire; also that the patient is protected from touching the spout of the kettle or having the steam touch her face directly.

SUMMARY

Temperature.

In treatment of disease what a rise or fall of temperature indicates.

A degree above or below normal to be watched.

One member in family able to use clinical thermometer.

Normal temperature.

Pulse.

Respiration.

How they vary.

Rise in temperature in adult more important than in child.
Temperature of body in health highest in evening.
Meaning of temperature below 95° F.

How to use a clinical thermometer.

Shake down carefully until mercury is below 96° F.
How to insert thermometer in mouth.
Remove in three minutes and note result.
Care of thermometer before and after using.
Special care in fever cases.
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When taken by rectum how to use thermometer.
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Rectal temperature highest register.
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How to count it and where.
Light gentle pressure.
Counting twice over to be accurate.
Pulse may be counted different parts of body.
Do not count pulse with your thumb.
Principal points in taking pulse.
Reason for not pressing too firmly when counting.
Patient's hand and arm at rest.
Not necessary to describe different kinds of pulse beat in this book.
Pulse always quicker with patient standing and sitting than lying down.
Slight causes increase the pulse beats.
Importance of noticing if temperature and pulse rise at same time.

Respiration.

When and how to count it.
Best during sleep.
Temperature, pulse, respiration taken more accurately when patient is lying down.
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Medicines.

Few simple rules when giving medicines.
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Read label first before giving medicine.
Terrible accidents result from neglect of this rule.
No bottle to be kept without a label.
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How to give a dry powder.
Ice used when giving oil will help to disguise taste.
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Drugs deteriorate with age.
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Medicines to be given exactly on time.
When to administer tonics, laxatives, etc.
Disguising the taste of medicines.
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Dainty way to administer disagreeable doses.

Medicines given in suppositories.
Oil carefully
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How to use eye drops.
Where to insert drops.
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How to hold lid.

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In cases of croup, asthma, laryngitis, etc.
Pitcher may be used.
How to prepare it.
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Appliances needed — stove, stiff paper over kettle.
Arrange tent over bed.
Guard against burns from stove or steam.

CHAPTER IV

BATHS — CLEANSING AND MEDICINAL

Baths. If every one understood how necessary baths are in the prevention as well as the cure of disease, and how much they add to bodily comfort, the daily baths would never be omitted, in health or sickness.

Once upon a time in the days of our great, great grandmothers, a weekly bath (usually Saturday night) was considered to be all that any one could demand in the way of cleanliness. But we have learned the great importance of the daily bath to keep our bodies in perfect physical condition, by opening the pores of the skin, and thus removing the waste material from the blood, brought to the surface by numerous little sweat glands.

Also we recognize the good moral as well as physical effect that is experienced when one emerges from the bath-tub, skin fresh and glowing as a result of hot water and friction; for bathing stimulates the circulation, and thus helps the blood to throw off impurities.

Therefore during an illness, thorough cleanliness of the body is a most positive aid to the restoration of health.

There are two classes of baths; a bath to make one clean, and a bath for medicinal purposes.

For herself — the Home Nurse will find a quick plunge into cold water, or a cold sponge bath, and brisk rub with rough bath towel before breakfast, a wonderful stimulant for her day's work (especially if her sleep has been broken with night nursing).

For your patient, an hour or two after breakfast is the time for baths, though sometimes a bath at night before "sleeping time" will be found more restful. In either

case, the strict rule of allowing one hour between meal and bath should never be broken. The bath stimulates circulation and takes from the stomach some of the blood required by the glands of the stomach, to digest food — and therefore indigestion, nausea and headache frequently follow when a bath is given immediately after eating.

Daily bath in bed for cleanliness. During sickness an extra need exists for the use of soap and water, especially when there is any fever, as the pores of the skin require to be kept open. The daily bath is also most refreshing and stimulating when the system is weakened with sickness; besides this, the muscles have no chance of working while lying in bed, so that a little gentle rubbing each day after the bath will be found to be of great service in keeping them in good shape. When rubbing the surface of the body, a little vaseline or cold cream should be used on the hands to make them pass smoothly over the skin.

Preparation for bath. Before giving a bath in bed, you should have everything needful at hand, so that you need not stop in the middle of the bath, leaving your patient half dried, while you run for extra towels, clothing, or other necessaries. If you intend putting on a clean nightgown, undervest, or pajamas, hang them over a chair in front of the fire or register so that they may not chill the patient. Should he be weak or liable to take cold easily, have a hot water bag filled ready to apply to the feet, and be careful that the windows are shut, the room warm and that no draughts may reach the bed. Place a chair or small table at the side of the bed ready for the basin or foot-tub, which is to be filled with very hot water; and a little extra hot water should be on hand, as it is apt to cool quickly in a large wide basin. Two wash cloths are better to use than sponges, one for the upper and one for the lower parts of the body, also a bath towel and a couple of soft ones for the face and hands. Castile soap

is the best and purest, and a little alcohol or salt in the water will be found very refreshing and is a safeguard against taking colds.

Giving the bath. When all is quite ready and the room warm and comfortable, remove your patient's clothing and place him between two blankets, or, if you prefer it, use one blanket over, the bath towel underneath the portion of the body you are washing, moving it from one side to the other as you work. Never expose your patient more than is absolutely necessary. A bath may be given entirely under the blanket, so that the surface of the body will not be exposed to the air.

The face is bathed first, then the neck, arms, chest, and abdomen; turn the patient on one side and bathe the back, and finish with the legs and feet. Do not uncover the body more than is necessary to wash each particular portion. Dry each part carefully as soon as you wash it, especially behind the ears, between fingers and toes, under the arms, and the pelvic region. Remove the towels and blankets, and put on the fresh warm clothing. The feet may be placed right in a small tub of water. To do this: bend up your patient's knees, and lift the legs and feet with one hand while with the other you insert the foot-tub and rubber to protect the bed. A nervous patient will find great quietness to the nerves when the feet are allowed to remain in the tub five or ten minutes, and are then well dried and rubbed with alcohol. If the bath has proved exhausting, give a drink of hot milk, broth, or eggnog, and place a hot water bag at the feet. After the bath, always clean the finger and toe nails, and brush the hair.

A bath in bed given according to these directions will only take at the outside from fifteen to twenty minutes, and will prove of great comfort to the invalid. And when once your patient is persuaded to have a bath, he is quite surprised at the ease with which it can be given, and the comfort and refreshment resulting.

Bath for the hair. Follow the same rule in regard to having everything on hand required. Canthrox, soap solution, or Castile soap; cold and hot water, towels and a piece of rubber sheeting. Draw your patient over to the edge of the bed, then cover the pillow with a piece of rubber sheeting and heavy bath towel; turn the lower ends up around her neck to pin them under her chin; make a little hollow under the head, by extra pillows on each side to hold the rubber sheet up at the edges. Have the basin or foot-tub on a chair on a lower level than the pillow, and make a trough with the rubber sheet, down into it for the water to run off. Rub the shampoo into the hair, and scalp, then pour a little hot water over the head to wash off the soap; repeating this two or three times, rinse off with cold water; dry the hair as well as possible, remove the rubber sheet and bath towel, cover the pillow with a warm dry towel, and spread the hair out on both sides.

Baths for babies. The Home Nurse may frequently be called upon to bathe a small child, or even a tiny infant, and the following suggestions should be followed:

Regarding the temperature of the water: the rule is, the younger the child, the hotter the water. A three months' baby requires water at 95° to 100° F. A year-old baby can stand from 85° to 90° F. and a two-year-old about 75° to 80° F. Never give a bath to a baby without a bath thermometer for the skin of a baby is very sensitive and easily hurt.

A tiny baby about a month old should not be in the tub more than two or three minutes.

Giving the bath. Before giving the bath have all the appliances on hand, put on a rubber apron and heavy bath apron; undress the baby and wrap her in a bath blanket. It is wiser with a tiny infant to wash face, ears, fingers, toes, buttocks, etc., before putting her in bath, then support the back of her head and shoulders with your left

hand and hold the legs with your right while you place her in the tub (a small towel placed in the bottom of the tub is best for an infant to rest on).

A warm towel will be needed to dry her off, then a little powder to prevent chafing of the skin. A child over three years of age should be sprayed off with cold water after the bath, as this hardens the system and prevents taking cold.

Baths for medicinal purposes. There are many kinds of different baths required during sickness, and some of them will have to be given by the Home Nurse under the doctor's directions, when no trained nurse is available.

Baths to reduce temperature, stimulate the circulation, soothe the nerves, cause perspiration, as counter-irritants, etc. All kinds of medicated baths are of course given only by the doctor's orders, and he will supervise the arrangements. Some of the therapeutic baths cannot be given outside a hospital, such as electric baths, light baths, vapor baths, etc. We will therefore discuss only the kind of baths that may be given with the limited appliances of a private home, and by the Home Nurse.

Cold baths in fever cases. "Water is a very valuable instrument in overcoming the evil results of fever," writes one of our celebrated physicians. In fever cases the purpose of the cold bath is to improve the condition of the heart, lungs, and kidneys, to reduce temperature and soothe nervousness and mental conditions. At the same time it must be remembered that cold baths are often depressing and may result in shock when the system is weakened by sickness. So the Home Nurse should never give a cold bath of any description, to her patient, without the approval of the doctor. For over twenty-five years, cold tub baths and sponge baths have been used in this country as a treatment in fever cases, and it is well for

the Home Nurse to be acquainted with the routine of these baths so that she may know what to do in case of an emergency.

Cold tub bath. Required articles are as follows:

A bath tub (a tin one might be procured and raised on blocks to the level of the bed, or the patient carried into the regular bath tub).

One pillow or rubber ring to support the head.

Bath thermometer.

Basin with pieces of ice (to add to the water when it gets warm).

Gauze compress for the head.

Cotton to insert in the ears, to prevent the water entering.

Towel, or binder for the patient's loins.

Hot water bag to put in bed for the feet.

Dry towels.

Two blankets.

Piece of rubber sheeting.

Clean sheets.

Safety pins.

The physician will order the temperature of the water, according to the age and constitution of the patient, about 70° F. to 80° F. is the general rule; but a higher temperature is employed in the case of children and elderly people.

Giving the bath. Two or three people are always required to help. If a trained nurse is not in charge of the case, the doctor will remain to take charge, and watch the patient's pulse and general condition. Place the bathtub close to the bed, three quarters full of water. Sometimes in private homes the patient has to be carried into the bathroom for the bath. Fasten a sheet over the top end of the bathtub to make a rest for her head and to support air cushion or rubber ring, pin the binder round her loins, put cotton in the ears, take off the nightgown, and cover your patient with a sheet. Draw her to the

side of the bed, nearest the bathtub. There will not be a stretcher in a private home, but a hammock net will answer the purpose, or three people can lift her, or an ironing board may be used covered with a blanket. One assistant will grasp her under the arms and support the head, a second will lift the waist and the upper parts of the thighs, and the third the legs and feet. If the patient holds herself stiff and straight it is easier to lift her, but she must not be allowed to exert herself. The doctor will order hot coffee or a stimulant, if necessary, before the bath. Lower her gently into the bathtub, the cold compress (gauze dipped in ice water) is placed on the head, and two assistants commence at once to rub the body to cause friction. Cold water and friction must go hand in hand, as one is not of value without the other. One assistant rubs the arms, back and chest; the other, legs, thighs, and feet.

In typhoid fever the abdomen should never be rubbed, as it may produce a hemorrhage.

Friction must be kept up as long as the patient is in the water, generally about fifteen minutes. Also the compress must be continually changed on the head to keep it cold. When the bath thermometer shows that the water in the tub is getting warm, a little ice is added to keep it at the prescribed temperature.

While the bath is given, one assistant should get the bed ready, turn the mattress, put on a fresh under-sheet, draw-sheet, and cover the bed with a blanket, rubber sheet and cotton sheet in the order given; arrange hot water bags (well covered) for the feet.

Before lifting the patient back into bed, unpin the binder and let it drop off, then put a dry sheet over the patient and lift her on to the bed; dry with the sheets, slip out the two wet sheets and the rubber sheet and your patient will lie on the blanket. Cover with another blanket and place a hot water bag at her feet. Give her a hot

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drink, broth or beef-tea (milk would not digest well after [illegible] bath).

The Home Nurse will seldom if ever be called upon to give a bath as just described, but as a substitute a slush bath or tub bath in bed may be ordered by the doctor and in the absence of a trained nurse the Home Nurse will be in charge.

Slush bath or tub bath in bed. Appliances required are the same as are used for a tub bath, omitting the tub.

The bath may be given by means of pouring the water over your patient from a pitcher, while friction is kept up by an assistant, or using a spray made by a rubber tubing; funnel and spray-end, extending from a tub or pail of water placed on a table above the level of the bed. Again the temperature of the water will be ordered by the doctor. In giving a slush bath the water becomes warm rapidly, and small pieces of ice must be added to keep it at the required temperature.

How to give the bath. A large rubber sheet is placed under the patient, and a cotton sheet over her (with a towel across her loins), cold compresses for the head and a hot water bottle at the feet.

There are two ways to make a trough for the water, to run away, either by a roll of blankets at both sides of the bed, and across the foot over which the rubber sheet is well tucked in; or what is better, a clothes line fastened all around the bed, or from a bar at the head of the bed to a bar at the foot on both sides, and the edges of the rubber sheet put over the cord, and if necessary fastened there with clothes pins, or tie with cord sewed on to the rubber. Then if you can have the head of the bed raised on two pieces of wood, and the rubber sheet at the foot folded close, pushed through the foot of the bed and directed into a pail, the water will run off without trouble.

Friction must be kept up all the time, and must not be too heavy as the skin will become sore. The patient's

back must not be neglected, the patient can be turned slightly on her side when necessary. About ten or fifteen minutes is usually the length of this bath, then, remove the rubber sheet, dry your patient, cover with a blanket and administer a hot drink.

Cold sponge baths. The Home Nurse will be called upon to give sponge baths far more frequently than tub baths or slush baths, for reducing temperature and toning up the system. These baths should be given as quietly as possible so that your patient may not be disturbed more than is absolutely necessary.

Appliances. A foot-tub or large basin is filled with water of temperature between 70° F. and 80° F.

A small basin containing pieces of ice to lower the temperature of the water when necessary. Be careful not to allow your patient to know the temperature of the water, or to see the ice, as she may become nervous.

A bath thermometer.

Two large wash cloths.

Two cotton sheets.

One rubber sheet.

Bath blanket.

Hot water bottle.

Place the rubber sheet with towel over it under your patient, remove nightgown, and cover your patient with a sheet, then put a rolled-up blanket under the edge of the rubber on each side of the bed, forming a hollow around the body, and it will prevent the water dripping over the mattress. Wring out a compress of gauze from the ice water to cover the head (change it every three minutes but do not let it drip into the ears). Before using the water rub the body gently (except the abdomen) to promote circulation. Sponge the arms and chest first, with long even, downward strokes, changing the wash cloth after every fourth stroke, and use plenty of water. Should you have no one to assist you, sponge with one hand and

rub with the other, as friction must be kept up continually. After the arms and chest turn the patient gently on one side and sponge the back, then the legs. About five minutes should be given to each part except the legs, which do not require so much sponging as they grow cold quicker than the rest of the body.

Never under any circumstances rub or sponge the abdomen in typhoid fever, as there would be great danger of hemorrhage or perforation. Exposure to the air will not hurt the patient, and will reduce the temperature much more quickly than if you keep all the body covered during the bath. A sponge bath of this kind should last about fifteen or eighteen minutes, and plenty of cold water to drink ought to be given during the bath to cool off the inside of the body. Then wrap the patient in a blanket for ten minutes, to rest before replacing the clothing.

As a rule a hot drink of some kind is ordered before or after the bath. Of course these baths should never be attempted without the doctor's orders, and they are usually given under his directions, as there are many cases where the heart is weak and they would prove too exhausting to the patient.

Sponge bath with alcohol and water. When the fever is not very high and it is only necessary to give a light sponge bath, use alcohol 25 per cent. and water, temperature about 80° F., and two pieces of gauze. Do not uncover the patient, but slip your hand under the bath blanket that you put over the patient in place of the sheet, and go over each part in a slow, gentle manner, and your patient will be soothed and rested.

Salt tub baths. Salt baths are of great tonic value, especially in nervous cases, kidney trouble, and heart disease, and they can usually be given warm, about 80° F., or a little higher. Sea salt may be used, about one and a quarter pounds to every gallon of water, or ten pounds

to a tub half full of water. Allow the salt to dissolve well, before the bath. Your patient remains in the water about three minutes the first day and a little longer each day, until fifteen minutes is reached. Rub gently all over the body while she is in the tub.

Salt rubs. Salt and alcohol, or salt alone is often used to allay nervous symptoms, it is a good tonic in nervous cases. Wet salt or salt and alcohol is rubbed with the hand all over the body of your patient, until the skin is red; then bathe off with cold water, wrap her in a warm dry sheet, and dry quickly.

Hot baths. Very hot tub baths are sometimes given during illness, to cause profuse perspiration. The temperature of the water may be as high as 100° F. and slowly increased until as hot as 110° F. Cold cloths must be kept on the head, and after the bath wrap the patient in blankets, and give plenty of hot water to drink. The blankets are left on for about an hour, then the body rubbed dry, and a refreshing sleep will follow.

When giving a bath to a very stout person dry carefully under the breasts between the folds of the groins and the thighs, and powder afterward, because if moisture is allowed to remain in these places the skin will become raw and irritated.

Foot baths. During an illness when there is severe headache and restlessness, and the feet are cold, a hot foot-bath will be found very soothing and quieting to the nerves. It can easily be given even when the patient is unable to leave the bed. Fill the foot-tub half full of water, temperature about 106° F. and, turning up the bed-clothes from the feet to the knees, place the foot-tub on the bed, bend the knees up, and put the feet into the water, covering the feet and legs with a double blanket. The water must be as hot as can be borne, and the bath should last for about twenty minutes. As the water cools, add

some very hot water but do not allow it to touch your patient's feet, pour it slowly into one corner of the tub until the water is as hot as your patient can bear it.

Mustard baths. Where there is much fever, and the head is very hot and heavy, as in fever cases, sunstrokes, bronchitis, and sometimes in grippe and other illnesses, a mustard foot-bath is frequently ordered by the physician. A high pail or foot-bath is filled with hot water, and the amount of mustard used varies according to the age of the patient. For an adult, about a tablespoonful of mustard to every gallon of water is the usual quantity. Dissolve the mustard first in lukewarm water to develop the oil, then add to the bath, water at a temperature of 100° F. The water should reach almost to the knees. Cover the patient's legs and the tub with heavy blankets to promote perspiration; for the same reason a hot drink should be taken while the bath goes on. At the end of twenty minutes, dry the feet gently, roll them in a blanket, and put your patient back to bed.

For a mustard tub bath the same proportion of mustard is required. Your patient lies quietly in the tub for about fifteen minutes, then wrap her in a warm sheet; and dry by patting, not rubbing.

Bicarbonate of soda and bran baths. In some fever cases, such as measles, when the skin is irritated and causes itching or when there is an eruption on the skin caused by prickly heat, hives, etc., the doctor may order a tub or sponge bath with bran or bicarbonate of soda.

The bran bath is made with a cheese-cloth bag containing between one and two pounds of bran. This bag may be either boiled in water for half an hour, then the water drained off and poured into the bath tub half full of warm water, or the bran bag may be allowed to soak in a foot-tub of water until the water becomes milky, when the bran bag is removed, and the water used for a sponge bath.

With bicarbonate of soda, the amount used is about seven or eight ounces of the soda to every gallon of water. Allow the soda to melt completely, then proceed as described in giving a mustard bath.

SUMMARY

Baths.

Necessary for prevention as well as cure of disease.
Daily bath.
Importance of bath.
Moral as well as physical effect.
Necessity during illness.
Two kinds of baths.
Bath for Home Nurse.
Hour of bath.
Time allowed between meal and bath.
Reason for an hour's delay.

Baths for cleansing the skin.

Keeping pores open during illness.
Rubbing good for the muscles.
Giving a bath in bed.
Everything necessary on hand.
Clean clothing warmed.
Hot water bag.
Room warm, window closed.
Appliances: Foot-tub, water, soap, wash cloths, towels.
Giving the bath: Do not uncover more than is necessary.
Wash and dry each part separately.
Feet placed in foot-tub.
Hot drink after bath.
Comfort to patient in bath.

Bath for the hair.

Everything on hand, before starting.
Appliances required:

Pillow covered with rubber sheeting and towel, ends pinned under chin.
Hollow trough made for water.
Method of bath.

Baths for babies.

Temperature of water.
Rule to be followed.
Importance of bath thermometer.
Length of bath.
Bath aprons for nurse.
Method of bathing a tiny infant.
An older child sprayed off with cool water after bath.

Baths for medicinal purposes.

Different kinds may have to be given by Home Nurse under doctor's directions.
Baths for many purposes.
Some baths may be given only in hospital.
Baths described that may be given at home.

Cold baths in fever cases.

Value of water in fever cases.
Object of cold bath.
Care required in giving cold baths.
Never to be given to patient without doctor's orders.
Used for over twenty-five years, in treatment of fevers.
Necessary for Home Nurse to know routine in case of emergency.

Cold tub bath.

Appliances required:
Two or three assistants necessary.
Doctor will take charge in absence of a trained nurse.
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Preparing patient.

Substitute for stretcher.
Importance of friction.
Preparing bed for patient.
Care of patient when returned to bed.
Hot water bag.
Hot drink.
Home Nurse seldom called upon to give such a bath.
Slush bath often used as substitute or tub bath in bed.

Slush bath or tub bath in bed.

Method of giving bath: (Page 50.)
Arrangement of bed — two methods.
Duration of bath.
Importance of friction.
After-care of patient.

Cold sponge baths.

More frequently given by Home Nurse.
Do not disturb patient more than necessary.
Appliances: (Page 51.)
Method of giving bath. (Page 51.)
After-care of patient.
Exposure to air not harmful to patient.
Never to be given without doctor's orders.

Sponge bath with alcohol and water.

Given under cover.
Soothing to nervous patient.

Salt tub baths.

Their value.
Temperature of water.
Amount of salt.
Method of procedure. (Page 53.)

Salt rubs.

Salt and alcohol; or salt alone.

Good tonic for system.

Hot baths.

To cause profuse perspiration.
Temperature of water.
Care in giving baths to stout people.

Foot baths.

Curative power.
Methods of procedure.
Temperature of water.
Duration of bath.
Care not to scald patient when adding hot water.

Mustard baths.

When given.
Amount of mustard.
How to prepare bath.
Giving the mustard in foot bath.
Method of mustard tub bath.
Patient lies quietly in water.
Patting the skin dry not rubbing.

Bicarbonate of soda and bran baths.

For irritation and itching of skin.
Preparing a bran bath.
Two methods.
Preparing a bicarbonate of soda bath.

CHAPTER V

SYMPTOMS AND NURSING OF INFECTIOUS DISEASES

Infectious diseases. Modern science has greatly reduced the danger of epidemics from infectious diseases, by awakening the world to the meaning of such terms as — *isolation, disinfection, prevention, antitoxin,* etc.

Prevention. The appearance in the home of a case of infectious fever, in the days of our grand-parents, usually led to a severe epidemic spreading all over the neighborhood. Friends and relatives, even children were frequently allowed to come into the sick-room, where scarlet fever, measles or diphtheria, reigned king; and even household pets — dogs, cats, birds, etc., carried germs broadcast throughout the community; the result, frequently, was untold suffering, weakened constitutions, and death.

To-day the Board of Health's placard on a house is the first warning against spreading disease; and when this is followed by the faithful observance of the rules for isolation, and disinfection, it has become possible to confine a case of infectious fever, not only to one family, but even to one member of the family.

But with all the modern knowledge of the cause and prevention of disease, people are not always as particular as they might be to protect others when there is an infectious disease in their own home; often going out of the sick-room into a neighbor's house, a crowded car, or a public meeting place, without proper change of clothing; thus carrying numerous little germs in the folds of their garments, these germs fasten themselves upon others, espe-

cially those whose system is run down and consequently more liable to contract disease.

Contagious and infectious fevers. Infectious diseases are such as are caused by some germ. *Contagious diseases* are such as are communicated by direct personal contact, as by touch or by exhalations. The distinction is not of great importance now.

Some fever germs are carried in milk and water, more especially typhoid, tuberculosis, and diphtheria; these are called "water borne diseases." Typhoid germs have been found in butter, oysters, water-cress, ice-cream, etc. When there is a suspicion of these fevers being in the neighborhood, the water and milk ought always to be sterilized before using. Milk is a common vehicle of infection, because in it the bacteria develop rapidly. Flies have also been proved to spread typhoid, carrying the germs in their feet and wings; of course malaria is carried by mosquitoes. Prevention is at all times easier than cure. So absolute cleanliness in and around all parts of the house, sunlight and fresh air are the best preventatives to disease.

What is fever? Fever is a symptom, not a disease itself. It is present in all infectious and contagious diseases. When the disease commences to yield to treatment, then the fever disappears of itself — so modern science concerns itself first with the care of the disease, and not primarily with the reduction of fever, as was formerly the practice.

Five principles in treatment of fevers. Rest, diet, fresh air, water, drugs are the five special principles summed up by one of our best medical authorities to be observed in the treatment of infectious diseases.

Rest. Both mental and bodily rest are necessary, and these will only be found in good nursing, cheerful atmosphere, absence of all household or business worries, and cool, quiet, well-ordered congenial surroundings.

Diet. Sufficient food, well cooked, daintily served and

of the right proportion of calories to build up the body.

Water. All the patient can drink, offered frequently during the day and night, without waiting for a request (if possible never ask a sick person what she wishes to eat or drink, bring to the bedside what is ordered and there is far more possibility of its being accepted). Under water; is also included baths of all kinds, external and internal, compresses and packs.

Fresh air. All that can be introduced into the sick-room without draughts, and when possible open air treatment as described on page 6.

Drugs; — but as the prescribing of drugs is outside the province of the Home Nurse, we will not discuss the subject.

To apply these principles in the treatment of infectious diseases, we must consider the choice and care of a suitable room, isolation, disinfection, and the special requirements of patient, physician and nurse.

Choice of room. Choose the room best suited for the comfort of both patient and nurse. The special requirements of the patient are — free ventilation, good light, sunshine, space and quiet; and for the nurse — nearness to the bath-room, and her own sleeping room.

Of course a top floor, or an extension with bath-room and balcony is our ideal; so that the patient may be entirely isolated from the rest of the family. But in a city apartment, this is impossible, and the nurse must choose whatever room may be the most easily isolated from the rest of the house.

Preparation of the room. For cleanliness and ease in nursing, before the patient enters the sick-room, take up the carpet, remove heavy curtains, upholstered furniture and all chairs, tables, etc., not actually required; especially anything that may be hurt with the daily use of disinfectants. During warm weather, or when the room is small, everything but the bed, one table and a

couple of chairs should be removed — to allow the air to circulate freely; for the same reason draw the bed out into the middle of the room, and protect the head from draughts with a screen.

In the case of a very contagious and infectious fever, a sheet wrung out of carbolic acid 1:50 or bichloride of mercury solution 1:1000 should be hung up over the door; and if a whole floor cannot be given up to the patient, all doors leading to other rooms should have strips of paper gummed over the cracks.

The bed. Your patient will not gain real rest in bed unless the bed is comfortable. See page 2 for directions how to make the bed, according to hospital rules.

The bed covering must be as light as possible in fever cases, a sheet and one blanket being sufficient. Instead of a spread, use a thin sheet, as it is only needed to keep the blanket clean. The oldest bed linen and night-clothes in the house should be used, so that they will not be hurt by frequent boiling and disinfecting. In fever cases the bed linen and night-clothes ought to be changed as often as possible, as there is always a slight odor from the fever unless everything is kept immaculately clean.

Disinfection of bedclothes. As soon as the linen is taken off the bed, roll it carefully, and at once, so that the germs may not be spread about the room, and soak it for at least two hours in a pail containing a solution of 1:50 carbolic, after which it may be taken downstairs and boiled in soap and water. Carbolic is better than bichloride for disinfecting clothing, as the latter is likely to turn the clothes yellow.

Care of the room. To clean the floor and woodwork every morning, a cloth wrung out of bichloride solution 1:1000 should be passed over it; if a broom is used, it must be covered with a damp cloth. The cloth that is used for dusting should also be dampened with a disinfectant, and if you fill some vessels with a two per cent.

formalin solution, and stand them in different parts of the room, it will purify the air by absorbing some of the germs floating about. These solutions must be renewed every twenty-four hours, as they lose their strength when exposed to the air for any length of time. A great deal may be done to prevent the spread of disease, by scrupulous cleanliness, and the free use of disinfectants.

Open fireplace. An open grate fire is particularly useful in contagious cases. Apart from its cheery aspect, and help in ventilation, you can burn small pieces of gauze or linen which have been used around the patient, without removing them from the room.

Atmospheric temperature. The temperature of the room should not be higher than 68° F. In summer time the air can be kept cool by means of an electric fan. Standing bowls of ice around the room will also help to keep it cool. The ventilation must be carefully attended to night and day. Fresh air is of the utmost importance, also an abundance of sunshine.

Care of food. No food of any kind should stand in the room, lest it become infected. When a bedroom refrigerator is not available, all eatables should be kept in another room, or outside the window. A wooden box securely fastened with cords outside the window forms a convenient cupboard for jellies, milk, and broths, etc.

All glass, china, or silver in service during the illness ought to remain with the patient, and not be removed to the family dining-room until properly disinfected.

Books, papers, and toys used during a contagious fever will have to be destroyed, as they can never be thoroughly disinfected.

Disinfection of utensils. Each time before the bedpan, urinal, or sputum cup is used, put a little carbolic solution in it, 1:12, and before emptying the contents, cover it completely with carbolic or formalin and allow it to stand for half an hour, so that it will be thoroughly

disinfected. These precautions are especially to be observed in the case of typhoid fever, as the germs of that disease are found in the stools in great abundance, also in the urine and sputum, and may be easily communicated to any one nursing the case, unless particular care is observed. It is also necessary in typhoid fever, if there are involuntary movements, to steep the bed linen immediately in a strong solution of carbolic for a couple of hours.

Except when quite unavoidable, no member of the family should use the water-closet where the evacuations of a typhoid fever patient are emptied daily. If it is absolutely necessary to do so, plenty of disinfectants should be used all the time. Formalin is one of the best for this purpose, and the closet should be flushed with boiling water two or three times a day.

Care of the patient. The rules for general nursing given in Chapter II apply also in contagious diseases, but a few extra points are here noted to meet the need of fever cases.

A tepid sponge bath every day should be given to the patient (see baths). Physicians recommend flannel nightgowns, and should the flannel be irritating to the skin, a thin gauze or silk undervest may be worn.

Treatment of eruption. With the eruption, there may be an intense itching of the skin; this will be soothed by a sponge bath, adding one teaspoonful bicarbonate of soda to three pints of water; and when peeling commences, oil of some kind should be gently rubbed over the skin after the daily bath. One physician prescribes a warm sponge bath twice a day, followed by alcohol rub, and then an application of oil or vaseline.

There is generally a great deal of headache when the fever runs high, and it is relieved by keeping the head cool with ice cloths. Cold compresses to the back of the neck, or an ice bag, will also be found to relieve headache. Hot water bottles at the feet will help to cool the

head; and a rub with alcohol for a few moments will warm the feet quickly, when they become cold and clammy.

When the fever is very intense, the feet become dry and stiff, and much relief will be given by a daily application of sweet oil and menthol mixed.

Small pieces of cracked ice for the mouth, and water without limit to drink will help keep the mouth and throat in good condition. One authority states that an inflamed condition of the mouth and bad digestion is often due to insufficiency of drinking water, and nourishing food. Drink should be offered every hour, and not left to the patient to ask for it. Over two quarts of fluid should be taken in the twenty-four hours.

After each feeding, wash the mouth with an antiseptic mouth wash.

In typhoid fever the tongue and gums become thickly coated with a dark brown coating, called "sordes," which if allowed to dry and crack will make the mouth excessively sore; this can only be prevented by frequent washing with an antiseptic solution and a small piece of gauze or cotton wool, which should be burned immediately.

A little cold cream or glycerine and rose-water on the lips will prevent their chapping with the fever.

In preparing for the night, rub the back and limbs with alcohol, and bathe the face and hands. The rubbing will soothe the restless feeling that comes after lying in bed many days, and it is also a great inducement to sleep. Always rub from the feet upward, in long, quiet, strokes.

Absolute rest of mind and body are necessary to insure a quick recovery. A dim light should be kept burning all night, either in the room, well shaded from the patient's eyes, or outside the door, because while in a feverish condition the patient may have bad dreams, and wake up in the dark frightened and nervous.

When the fever breaks profuse perspiration is the re-

sult, and there is serious danger of contracting a cold. Rub the body with a warm, dry towel, put on a fresh, well-heated, flannel nightgown, and, if necessary, dry sheets. During some fever cases, it is necessary to change the patient two or three times in the night to prevent a chill.

Instead of handkerchiefs, keep on hand a supply of cheese-cloth, cut it up into small squares and burn them as soon as they are used. This is a very necessary precaution against spreading the disease, especially in cases of tuberculosis and diphtheria.

A daily record must be kept for the doctor, noting any little change during his absence that may be of assistance to him in his treatment of the case. The urine ought to be measured and recorded, especially during scarlet fever, as Bright's disease is one of the complications that sometimes follows this fever, and is first shown by the urine; so that any particular change in the amount, color, or odor of the urine ought to be reported.

Diet. A small gas stove is indispensable in nursing diseases that have to be isolated, so that plenty of hot water may be obtained at all times.

In all fever cases the diet for the first stages of the disease is given in liquid form. This generally consists of milk and broths. When there is any nausea, peptonized milk, or milk and lime-water are preferred. About two or three ounces, at least, ought to be given every two hours while the fever is at its height, increasing the amount gradually when the temperature lowers.

Never give stimulants without the doctor's orders, unless in a case of collapse; but it would be well to provide for this beforehand by asking the physician exactly what you ought to do if such an emergency should arise during his absence.

All through the day give your patient plenty of water to drink, for which he will be most grateful. Do not wait

for him to ask you, but give a drink about every hour, as it is a great help in reducing the fever. This drinking water must be boiled and then allowed to grow cold in the refrigerator, as it is much safer than using the ordinary ice-water.

When "light-diet" is allowed: your patient will need cereals, gruels, bread, milk, milk toast, ice-cream, or lemon-ice; after the first few days, eggs, custards, oysters, vegetables; last of all meat.

Drinks of lemonade and grape-juice and orangeade are most refreshing, between meals.

Nourishment at night is often necessary in fever cases; as the high temperature is a great drain on the system. Ask the physician if it is best to wake the patient at night for nourishment.

Precautions to be taken by the Home Nurse. In the absence of a trained nurse, one member of the family should take it upon herself to be personally responsible for the care of the patient and the sick-room, and when relieved from duty, by the necessities of daily exercise, meals, and sleep, she should give careful directions to whoever takes her place.

Dress of nurse. A plain cotton dress must always be worn when nursing an infectious fever, so that it can be boiled and disinfected constantly. It is unwise to have starch in dress or petticoat, as the rustling caused by it is very irritating to a nervous patient. A cap or veil made from cheese-cloth or muslin, and pinned firmly over the forehead and under the hair at the back of the neck will prevent germs resting in the hair. Rubber gloves should be worn when emptying secretions, and caring for the throat; and the mouth and nose covered in gauze wet in 1:5000 solution bichloride of mercury while spraying or swabbing out the throat of a diphtheria patient; this rule is most important, for should the patient cough sud-

denly, the nurse would receive all the germs that fly out of the mouth. Also, in stooping over your patient, be very careful not to inhale her breath.

When nursing a fever case, if the Home Nurse takes a good walk in the open air every day, regular meals outside the sick-room, at least six hours' sleep in the twenty-four, a thorough warm bath daily, besides obeying the common-sense rule,— never to enter the sick-room when tired without eating or drinking something to refresh the system,— there is very little danger of contracting the disease.

The Home Nurse should not sleep in the same room as the patient. If no other member of the family is able to take her place at night, a room adjoining the sick-room should be given to the nurse, or even if necessary, a bed arranged in the hall. A bell beside the patient will call the nurse in an emergency; and she will easily train herself to wake at regular intervals to administer medicine, nourishment, etc. In serious cases, especially if the patient is delirious, another member of the family must take her place while the nurse sleeps.

One of the most important rules that the Home Nurse needs to remember is — never to eat anything in the sick-room, as the air will be full of disease germs which are very fond of hiding themselves in food. Before going to her meals she should always rinse her mouth with an antiseptic mouth wash, such as listerine, or a solution of boric acid, to remove the germs that collect in the mouth, around the gums, and under the tongue, and to prevent their being washed down the throat and absorbed into the system.

A physician, in speaking on this subject, attached the greatest importance to this precaution, so much so that he said he believed that in a few years people would not eat at any time without first rinsing out the mouth with an antiseptic mouth wash. Microbes of all kinds are

continually flying around us, entering our mouths every time we open them to breathe or speak, and lodging there waiting to be absorbed into the system with the food we eat, where they often develop and cause disease.

The nurse's hands must also be dipped in a disinfectant solution each time after she has been caring for the patient, and the nails ought to be kept very short and scrubbed with a nail-brush, as they form a hiding-place for germs.

Dress of the physician. Frequently the physician is obliged to enter other homes, after visiting a case of infectious or contagious disease; every possible care must be taken not to spread the disease. A gown, or sheet (which is easily pinned into a gown) to cover all his clothing, a cap made from a folded towel or a piece of cheesecloth for his head, a basin of hot water, soap, a bowl of disinfectant solution, alcohol, towels and a pair of rubber gloves and rubbers for his feet, should always be in readiness for his use before he enters the sick-room.

Fumigation. As soon as you have received permission from the doctor to move the patient into another room, give him a good, hot bath, and then sponge him all over, including the hair, with a weak solution of bichloride of mercury, 1:5000. Wrap him in sheets, and take him into an adjoining room that has previously been prepared and made comfortable. It is of great importance that after an infectious disease the sick-room should be thoroughly and carefully disinfected, as the troublesome little disease germs have a disagreeable way of lingering round for months and even years in various nooks and crannies.

As soon as you have moved your patient out of the sick-room, take all the bedclothes and put them into a pail of 1:20 carbolic solution, and let them steep for some hours. Wrap up the mattress and pillows and send them to one of the special establishments for sterilizing and disinfecting bedding, to be found in almost every city. Should there be no such place at hand, after a severe case of scar-

let fever or small-pox, do not hesitate to burn up the mattress as it is impossible to disinfect it thoroughly at home.

To prepare the room for fumigation; open all closets, and bureau drawers as the gaseous disinfectants only have a surface effect; pull down shades and stretch a line across the room on which to hang blankets or rugs. Books and toys had better be destroyed. Cover all cracks of doors and windows, even the key-hole, with gum strips of paper (gum is better than paste, and more easily removed afterwards). Be sure that fireplaces, ventilators and registers are well closed. A kettle of water boiling on a small stove will be required, as moisture is always needed for gaseous disinfectants, also heat; so have the room as warm as possible before fumigating.

Two disinfectants are used, formaldehyde and sulphur; the former is considered best. A tub of hot water is placed in the middle of the room, and in this a pail about a foot high to hold the formaldehyde.

To fumigate with sulphur; allow five pounds to a medium sized room, spread the sulphur on a pan and saturate well with alcohol; — the pan should stand on a brick or iron; in a tin pail of water. Set fire to the sulphur, close the door, and seal it on the outside. Twelve hours is required for thorough fumigation, then open the windows and air the room well.

Symptoms and stages in infectious diseases. Infectious diseases, as a rule, run a definite course. In each case special symptoms have to be observed, reported, and treated. It will be of help to the Home Nurse to classify the infectious diseases most likely to occur in families, the special symptoms that appear in each case, and some important rules to be followed.

There are three general periods, or stages, in fever cases — incubation, eruption, and desquamation.

Incubation — The patient has been exposed to the dis-

ease, which is gradually working its way through the system.

Eruption — When the rash appears, and the nature of the disease is declared.

Desquamation — Peeling or shedding of the skin, after the fever has disappeared.

Scarlet fever. After being exposed to scarlet fever it may develop at any time from one day to three weeks. A sudden chill (or with small children, sometimes convulsions), followed by headache, high fever and sore throat, herald the approach of the eruption, at the end of twenty-four or thirty-six hours; neck, chest, back; and then the face and whole body are covered by the rash. The throat and tongue are inflamed, the tongue appears first very white and coated; after a day or two becomes swollen and red ("strawberry tongue," it is called). Special complications to be watched for are: inflammation of the ears and kidney trouble. The physician should at once be notified if the patient complains of pain in the ears: and a careful record kept daily of the amount, and color, of the urine, and frequency of urination.

The mouth and throat must be attended to faithfully, according to the physician's directions. All the fresh air possible must be admitted into the sick-room, day and night.

After the daily bath, oil, cocoa-butter, vaseline or ointment should be rubbed gently all over the body to allay irritation, and specially to prevent spread of infection by the tiny particles of skin that peel off and fly about the room.

Strict quarantine, including disinfection of both patient and nurse, is important. Scarlet fever is both infectious and contagious; adults rarely take it more than once, but may carry it to others. Children should be carefully guarded from infection, and when possible removed from the house. Dogs and cats must be absolutely excluded

from the sick room, as they carry the germs broadcast over the community. For the general nursing see page 64.

Smallpox. Nowadays we hear and see little of this terrible disease — thanks to the strict rules enforced regarding vaccination. (If the Home Nurse has not had smallpox, she should be vaccinated afresh, before she undertakes to nurse the patient; it is also best to have the whole family vaccinated when a case develops in the home.)

Incubation period is a little longer than in scarlet fever, and after exposure, three weeks must elapse before all fear of taking the disease has passed.

High fever coming on suddenly, sometimes accompanied by a chill, headache, pain in the back and eyes, vomiting; these are followed about the third day with the distressing rash; sometimes the rash develops into separate pustules, which gradually increase in size and run close together; pus is in the pustules, and runs from them. Itching is most intolerable, and only the greatest care will prevent a lasting disfigurement of the skin, by the formation of little pits, wherever the patient scratches off the head of the pustules.

Many remedies are used to help the itching. Frequent prolonged, warm, tub baths; lasting if necessary for hours, have proved to be successful. Oily substances, vaseline, sweet oil, ointments, etc., used in quantities over the whole body and renewed frequently; cold compresses to face and hands where the itching is most intense; these are some of the simpler remedies. Constant warning must be given to the patient, not to scratch herself; and in the case of children, gloves should be tied on the hands; and at night, the hands fastened so that the child cannot reach her face. A mask of lint and ointment is sometimes laid on the face. The eyes must be irrigated every three hours, with boric acid solution; and vaseline, gently applied to

the edge of the lids will prevent their sticking together.

Absolute isolation must be strictly enforced, with the most careful disinfection; and again, fresh air and perfect cleanliness are of the first importance.

Diphtheria. Sore throat, glands swollen, and general feeling of all-over sickness, appearing within ten days after exposure to diphtheria infection, marks the beginning of the disease.

Antitoxin is now used extensively, and with splendid results; it lessens the effect of the disease in the patient, and when administered at once to other members of the family generally renders them immune to an attack. After twenty-four hours a pale gray membrane forms over the red, swollen throat. The Home Nurse should wear glasses, rubber gloves, and cover her mouth and nose with gauze wet in disinfectant, when spraying or swabbing the throat of her patient. This is of the greatest importance; as all the infection comes from discharges of the nose and throat.

Heart failure is the most dangerous complication; and until advised by the physician, the patient should never be allowed to sit up in bed, even during convalescence.

Encourage your patient to drink quantities of water, and give all the nourishing food possible.

Typhoid fever. Typhoid fever involves so much difficult and prolonged nursing, that, if a trained nurse is not available, the patient should be taken to a hospital, whenever it is possible.

In the emergency of a Home Nurse caring for a typhoid case, most careful and complete directions from the physician should be written down daily; a detailed record kept of every hour of the twenty-four, and some member of the family must relieve the Home Nurse daily, so that she may take out-door exercise; plenty of time for her food, and sufficient sleep away from the patient.

Between two and three weeks is covered by the incuba-

tion period in typhoid fever. Pains in back, abdomen, and eyes, headache, nausea, diarrhea and sometimes nose bleed, are among the symptoms. The temperature is characteristic — rising steadily higher evening and morning during the first week; the second week remaining high in the evening but occasionally lower in the morning, the third week shows a gradual drop in temperature, morning and evening, when the case is normal.

Infection in typhoid fever comes through discharges and through the mouth, by means of food and drink. Extreme care must be taken that all drinking vessels, spoons, forks, china, etc., used by the patient are boiled daily; and kept entirely for separate use by the patient.

Care of the mouth and gums are of more importance in typhoid fever, than in any other disease, as the infected germs lodge around the gums and teeth; and are washed down into the stomach.

The tongue becomes almost black in the center, with mucus covering the back of the tongue and the throat. Before and after every feeding, even a drink of milk, swab out the mouth, especially the back of the tongue, with whatever solution the doctor orders, using a swab made with a tooth-pick and absorbent cotton, dipped in solution; then apply a soothing lotion to prevent cracking of the lips and tongue.

Great care is required to guard against bed-sores, which are liable to appear owing to long continued pressure and lowered vitality. No moisture should be allowed to remain on the back; an alcohol sponge or rub should be given two or three times a day over the back, especially the buttocks and heels, followed by talcum powder; a firm rubbing is useful to stimulate circulation; frequent change of position from side to side, rubber rings and pillows to support the back are useful. When changing his position do not allow your patient to exert himself in any way, for fear of hemorrhage or perforation.

Throughout the disease disinfection of clothing, bedding, and utensils is of the utmost importance. When changing clothing or bedding, fasten each article at once in a bundle and carry at arm's length out to a pail or tub ready with disinfectants, 1:20 carbolic, or formalin three ounces to a gallon.

After the passing of a stool, wash the patient locally, and change the draw sheet if soiled in the slightest.

The Home Nurse should be exceedingly careful to wash her hands at once after coming in touch with the bedclothes or utensils used with her patient.

Quiet for the patient is also of great importance, no visitors, no excitement, and no family troubles must be allowed to cross the threshold of the sick-room; nor must the patient be allowed to sit up or be supported in bed for fear of heart failure, hemorrhage, or perforation of the bowels. For this reason a typhoid patient when in the least delirious should never be left alone for a moment, as there is great danger of his trying to get out of bed.

Frequent drinks of water should be administered between feedings, as much as two or three quarts a day, and special care used that the diet ordered, be strictly carried out, as the question of diet in typhoid fever is of the utmost importance. Milk, cream, eggs, sugar, bread and butter are the basis of diet used with great success in one of our big hospitals. Individual cases require various treatment, however, and a diet sheet written out by the physician in charge will be the guide to be followed by the Home Nurse.

Cold baths in one form or another, see page 47, will be ordered by the physician.

Hemorrhage, perforation and phlebitis are dangerous complications that may occur. The symptoms of hemorrhage are: rapid pulse, sudden drop in temperature, great restlessness, and blood appearing in the stools. All through the course of the disease, the stools should be

examined carefully, and any sign of blood reported at once to the physician.

Phlebitis is shown by increase in temperature and pain in one or both legs, tenderness and swelling. When these symptoms are observed, report at once to the physician.

Acute, sudden pain in the abdomen, is the special symptom of perforation. Immediate notice must be given the physician as an operation may be imperative to save the patient's life.

Tuberculosis. Except cancer, there is perhaps no disease that fastens upon its victim such long drawn-out suffering. Under the name of "consumption," our forefathers accepted this disease as a sort of inherited heirloom; and no care was taken to guard against infection. Now we know that tuberculosis is not inherited, although a tendency towards weak lungs may be handed down from parent to child.

Some authorities state, that every one inhales the tubercle bacilli; and that many individuals have a short attack without knowing it.

As infection lies in the sputum, saliva, and nasal discharges, it is easy to see how the whole world is in danger of inhaling germs. During the last ten years, giant strides have been made towards stamping out the spread of this dread disease, more especially by the prevention of expectoration in public cars and trains, etc. The chief of these measures are the doing away with the common drinking cups and towels, and the establishment of tuberculosis clinics, exhibits, and lectures that educate the masses and teach the proper treatment of patients in family life. Above all, we may place the fresh air and cleanliness propaganda.

When a patient expectorates on the ground, the sputum dries, blows about in the air, and is carried by flies into uncovered food. For this reason, covered sputum cups should always be carried by patients; and all gauze used

for mouth or nose burned at once. Kissing is also responsible for spreading the bacilli, especially with children.

Every part of the body may be affected — bones, joints, spine, glands, etc. In adults the lungs are generally the seat of the disease, while in children other parts of the body are more often affected.

Some of the symptoms are: loss of appetite, night sweats, general weakness, daily loss of weight, cough, pain in lungs, hectic color in cheeks; the temperature lower in the morning and rising every evening.

Every prospect of complete recovery may be given, if the disease is at once discovered and all medication faithfully carried out.

Open air treatment is of supreme importance, winter and summer; two special points in this fresh air treatment are,— keeping the patient warm, and out of all draughts; flannel clothing day and night may be worn; outing-flannel sheet, hood, mittens; and hot water bags for feet. See directions for making out-door bed, page 6.

Measles. Infection comes from the skin, and the secretions of nose and mouth. All children are highly susceptible to measles.

About ten days after being exposed to the disease, the eruption appears; first around the mouth, chin, forehead, neck and finally all over the body. In three or four days the rash disappears, and the skin peels off.

General rules of nursing are followed, with special attention paid to the eyes. A shade may be worn for the first few days, the eyes bathed frequently with boric acid two per cent., and if necessary the room darkened. Even during convalescence no reading should be allowed. Measles is serious on account of the complications that so often follow; great care should therefore be taken in disinfection and isolation of the patient.

Erysipelas. The infection comes through a cut, or wound in the skin. The most frequent kind of erysipelas is in the face and head. Following a chill, and high temperature the face (commencing around the nose and mouth) becomes red, swollen and greatly inflamed. As a rule isolation is not necessary when the dressings, and compresses from the part affected are burned at once. Rest, fresh air, good food are the principal needs of the patient. The physician will prescribe ointments or cold compresses for application.

Poliomyelitis. We have learned by bitter experience the great danger and far reaching consequences of this disease. It is a child's disease, and only very rarely found in older girls and boys.

Infantile paralysis is the name in common use, coming from the fact that the spinal cord is inflamed and paralysis of some part of the body almost invariably follows.

Infection is frequently carried through a third person, also through the patient, even after his recovery. Isolation, therefore, for both patient and nurse for at least three weeks should be enforced. The nose and mouth should be sprayed or gargled with antiseptic daily. Cases have been known of a friend paying a visit to a patient suffering from the disease, and carrying the germ to another family.

Absolute rest of limbs and muscles is necessary; and no massage should be given until after the acute stage has passed.

The beginning is very sudden, with fever, and convulsions and paralysis of some part of the body. All kinds of massage and electric baths are used during convalescence, so too, are good nourishing food, and out-door treatment.

Meningitis. A sudden chill, convulsions, headache, and vomiting, with stiff muscles of the neck, usher in this disease of the spinal cord. Delirium comes quickly, with

the legs drawn up and the head bent back. A great deal depends on the faithfulness in nursing and in carrying out the physician's instructions. Absolute quiet in a cool, dark room is necessary.

It is difficult to persuade the patient to take food, and it has to be given, as a rule, with a tube. Disinfection and isolation are required for patient and nurse, as the disease is carried through a third person.

Malaria. Modern research places the entire blame of this disease on the mosquito, hence the great activity of the last few years in draining swampy ground.

The symptoms are, distressing chills, at regular intervals, generally every second or third day, followed by high temperature, headache, nausea. The treatment is quinine; generally in large doses, about one hour before the regular hour for a chill. During the chill, put the patient to bed, with plenty of blankets, hot water bottles at the feet, under the arms, and over the heart; and give him hot drinks (not milk, for it disagrees with quinine). When the fever rises,— remove all hot water bottles and blankets, place a cold compress over the head and give an alcohol rub or sponge bath.

Dysentery. As a rule hot weather is the season for dysentery and with children it is often called summer diarrhea.

It is infectious through the stools, and care in disinfecting utensils, and clothing should be carried out. Gauze or paper napkins are best to use with children, and they should be burned at once.

Unwise eating during hot weather, unclean surroundings, and impure drinking water added to lowered vitality, form a combination that quickly develops the germ, once it is taken into the system. Blood and mucus seen in the stools, with pain over the abdomen, indicate dysentery. It would be very unwise for the Home Nurse to prescribe any course of treatment.

A physician should be consulted, and his rules as to diet and treatment carried out faithfully.

Pasteurized milk and gruels generally form the diet until the stools become normal.

Cleanliness of body and clothing, especially after every stool is important. Heat to the abdomen is most helpful, such as hot fomentations, turpentine stupes, or mustard leaf. Change of air frequently brings relief from the disease.

Whooping cough. We have been accustomed to consider whooping cough as a child's disease; but adults in the family frequently contract it. Infection comes through the sputum and cough. It is difficult at first to diagnose the disease, until the characteristic whoop appears with the cough, followed by vomiting and sometimes nose bleed.

Open air treatment, when possible day and night, good nourishing food, and separation from all other children are the principal points in nursing, with flannel underwear, both day and night, because a chill might follow the heavy sweats after a paroxysm of coughing.

Mumps. This is not dangerous, but is painful and most uncomfortable, besides being highly infectious with children. Swelling of the glands just below the ear, nausea, headache, and pain in eating indicate mumps.

Rest in bed, liquid diet, and special care in washing out the mouth and gums before and after every feeding, are all the nursing required

SUMMARY

Infectious Diseases.

Prevention, Board of Health placards a warning.
Observation of rules about isolation, and disinfection.
Care of patient.
Care of nurse and family not to spread disease.

Contagious and infectious fevers.

Various kinds. How fever germs are carried, water and milk special agents; best preventative absolute cleanliness.

What is fever?

Symptom not a disease, in all contagious and infectious diseases.

Modern science treats the disease, fever then disappears itself.

Five special principles: Rest, diet, fresh air, water and drugs.

Rest — good nursing, absence of worry, well ordered surroundings.

Diet — well cooked; right proportion, daintily served.

Water — abundance to drink, baths of all kinds.

Fresh air — when possible open air treatment.

Drugs — left to the physician.

Choice of room.

Best suited for comfort of patient and nurse.

Special requirements, ventilation, light, space, nearness to bathroom and nurse's room.

Top floor best when possible.

Preparation of room.

Remove carpet, curtains, heavy furniture.

Bed, table, chairs all that is necessary.

Hot weather, draw bed into middle of room.

Door protected by sheet wet with disinfectant.

Bed must be comfortable.

Light weight bedclothes. Use old linen.

Change frequently.

Disinfection of bedclothes.

How to disinfect them properly. Carbolic 1:50 then boiled.

Care of room.

Floor and woodwork wiped with bichloride 1:1000 daily.
Broom covered with damp cloth, also duster.
Free use of disinfectants, scrupulous cleanliness great aid to prevent spread of disease.

Open fireplace.

Particularly useful in contagious diseases.
Besides good ventilator, helpful to burn gauze or linen used around patient.

Atmospheric temperature.

Not higher than 60° F.
Electric fan in summer.
Fresh air important.

Care of food.

Not allowed to stand in sick room.
Absorbs microbes. Bedroom refrigerator good.
Wooden box outside window.
All dishes disinfected daily.
Books, papers, toys destroyed.

Disinfection of utensils.

Carbolic acid 1:12 before and after using.
Specially in typhoid fever.
Bed linen when soiled, disinfected at once.
Toilets used only for patient, or carefully disinfected.
Formalin good.

Care of patient.

Rules for general nursing.
Extra points to meet fever cases.
Sponge bath daily. Flannel nightgown recommended, thin gauze undervest.
When rash covers the body.
To soothe itching, bicarbonate of soda in water of bath.

When skin peels.
Oil rubbed over skin.
Headache relieved by ice to head, heat to feet.
Oil on feet prevents dryness.
Cracked ice to swallow, plenty of water to drink, keeps mouth and digestion well. Drink offered every hour.
After feeding rinse out mouth.
In typhoid, necessary to wash mouth and gums frequently with antiseptic.
Back rubbed, with alcohol at night.
Soothes restlessness.
Rest of mind and body necessary.
Dim light burned at night.
When fever breaks, rub body with warm towel, fresh night clothes.
Cheese-cloth used in place of handkerchiefs.
Daily record kept for physician.
Measuring of urine important.

Diet.

Small gas or electric stove to warm drinks and water.
Liquid diet at first, milk and broths.
No stimulant without doctor's orders.
Ask what to do in emergency.
Water given all through day, boiled, cooled in refrigerator.
Light diet (see page 164).
Lemonade, grape juice, orangeade, between meals.
Ask physician about nourishment at night.

Precautions taken by Home Nurse.

One member of family responsible for nursing patient.
Dress of nurse cotton, may be boiled and disinfected.
No starch in clothes, causes rustling noise disturbing to patient.
Gauze cap covering hair, rubber gloves when emptying secretions and spraying throat of patient.

Nose and mouth of nurse covered with wet gauze when caring for diphtheria patient.
Do not inhale breath of patient.
Walk in open air daily, regular meals outside sick room, good sleep, daily bath.
Never enter sick room when tired without eating or drinking something nourishing.
Home Nurse not to sleep in sick room if possible.
In serious cases relieved by some one while she gets proper rest.
Before eating rinse out mouth, wash hands and face.
Microbes lodged in mouth, around teeth, will be absorbed into system with food.

Dress of physician.

To prevent spread of disease, a gown or sheet to cover his clothing.
Cap made from towel, rubber gloves, and rubbers for feet.
Disinfectant for hands.

Fumigation.

Give patient hot bath, sponge over with bichloride 1:5000.
Take into another room.
Importance of proper disinfection of room.
Bed clothes disinfected in 1:20 carbolic.
Mattress and pillows sent to be sterilized or burned.
Directions for fumigating room.
Two disinfectants, and how to use them.

Symptoms and stages in infectious diseases.

Diseases run definite course. Three periods namely, incubation, eruption, desquamation.
Incubation — Exposure to disease.
Eruption — Rash appears.
Desquamation — Shedding of skin after fever disappears.

Scarlet fever.

Develops in one day to three weeks.
Symptoms: chill (convulsions often in children), headache, fever, sore throat.
Rash appears in twenty-four hours. Throat and tongue inflamed.
Special complications — inflammation of ear drum, and kidney trouble.
Mouth and throat to receive careful attention.
Plenty of fresh air.
After daily bath, oil or ointment rubbed over body.
Strict quarantine, disinfection of nurse and patient.
Fever both infectious and contagious.
For general nursing see Chapter II.

Smallpox

Vaccination important.
Symptoms: fever, chill, headache, nausea. Rash third day.
Rash forms into pustules.
Itching intolerable, great care to prevent pits forming by scratching.
Treatment, for itching, prolonged baths.
Oil, ointment rubbed on body, cold compresses on face and hands.
Gloves tied on hands of children.
Eyes irrigated frequently, boric ointment on eyelids.
Absolute isolation, and disinfection.

Diphtheria.

Symptoms: sore throat, feeling of sickness, fever, headache.
Antitoxin used, lessens effect of disease.
Home Nurse requires glasses, rubber gloves, and cover mouth and nose, when spraying throat of patient.
Dangerous complication, heart failure.

Patient not allowed to sit up in bed.

Typhoid fever.

Careful nursing required. Best to take patient to hospital when possible.
Directions of physician written down.
Careful record kept.
Symptoms; pain in back and abdomen, headache, nausea, diarrhea, fever.
Characteristic temperature.
Infection through discharges, and by means of food and drink.
Careful disinfection of all articles used by patient.
Care of mouth and gums important.
Swab out mouth before and after feeding. How to make a swab.
Care to guard against bed sores.
Alcohol rubs, rubber rings.
Change of position.
Disinfection of bed linen.
Quiet for patient important.
Never leave typhoid patient alone when delirious.
Give abundance of water to drink.
Special care of diet, only what is ordered.
Cold baths used.
Complications, hemorrhage of bowels, perforation, phlebitis.
Symptoms of hemorrhage.
Stools to be watched carefully.
Symptoms of other complications to be watched for.

Tuberculosis.

Not inherited.
Infection in sputum, saliva and nasal discharges.
Great advance made to stamp out; methods to prevent spread of disease.

Different parts of body affected.
Symptoms: loss of weight, night sweats, loss of appetite, cough, pain in lungs, fever.
Favorable prospects if disease is taken in time.
Open air treatment most important.
Two points, keeping patient warm and out of draughts.

Measles.

Eruption ten days after exposure.
General rules of nursing followed.
Especial attention to eyes.
Serious on account of complications.

Erysipelas.

Infection through cut or wound.
Symptoms; chill, fever, redness of face.
Isolation not necessary. Dressings burned.
Treatment; rest, good food, ointment or compresses for skin.

Poliomyelitis.

Child's disease, spinal cord inflamed, paralysis in some form follows.
Infection may be carried through third person.
Absolute rest, no massage until acute stage passes.
During convalescence, electric baths, good food, out-door life.

Meningitis.

Symptoms: chill, convulsions, headache, nausea, stiff muscles of neck, delirious.
Absolute quiet, dark room, careful nursing, food given by a tube.
Disinfection and isolation.

Malaria.

Carried by mosquito.

Symptoms: chills at regular intervals, high fever, headache, etc.
Treatment, quinine, patient put to bed during chill, heat to feet, cold to head.
When fever comes, sponge bath.

Dysentery.

Infection through stools.
Care to disinfect all utensils, and bedclothes.
Watch food in hot weather, and drinking water.
Blood and mucus in stools, pain over abdomen.
Doctor's rules carried out.
Milk and gruels for diet.
Heat to abdomen. cleanliness of body and clothing, change of air.

Whooping cough.

May be contracted by adults.
Characteristic cough.
Treatment, open air day and night, good food, flannel underwear.

Mumps.

Infectious with children especially.
Rest in bed, liquid diet.
Care of mouth and gums.

CHAPTER VI

PREVENTION AND CARE OF COUGHS AND COLDS. NURSING IN GRIP, BRONCHITIS, AND PNEUMONIA

Prevention of coughs and colds. The old-time adage, "Prevention is better than cure," if remembered and acted upon a little oftener than it is, would save a world of suffering and trouble.

Take for instance the coughs and colds that are so general in the early part of winter. When the weather commences to change, one of the family is sure to come home complaining of feeling chilly, sick, and miserable, with aching bones and all the first symptoms of a heavy cold. In nine cases out of ten, no immediate attention is paid to these symptoms, as they are considered too slight to be "doctored." Most people wait until the cold is in full swing before they try to stop it. Instead, if a little trouble is taken at the beginning to prevent it from really asserting itself, a great amount of unnecessary suffering would be saved, and in some cases an attack of bronchitis or pneumonia avoided.

One of the best precautions against taking cold is the plentiful use of cold water. A good plunge bath every morning, or at least sponging the throat, arms, and chest with cold water for a few moments, will cause the blood to circulate freely and brace up the system. Breathing through the nose instead of the mouth, when in the open air, will often prevent sore throat. Damp skirts and wet shoes should be changed immediately, and if the feet are cold and wet, dip them into cold water for a minute, and rub briskly with a rough towel. The passages of the

nose and throat should be kept thoroughly cleared so that the air can circulate freely through them, and thus prevent any clogging that might cause catarrh.

Care of coughs and colds. Once the symptoms of a cold really establish themselves, there are some simple remedies that can be tried to overcome it. The first thing which all doctors recommend is a good cathartic to clear out the system and reduce the feverish symptoms. This is always best taken at night so as to act the first thing in the morning. Almost every one has some simple home remedy he is accustomed to use, and it should be followed in the morning by a Seidlitz powder or one of the many mineral waters in general use. With children a dose of castor oil is the safest and best remedy to use, especially when there is any sign of croup. As a rule, calomel acts well with adults, in overcoming a cold; either in doses of one-tenth of a grain tablets, two taken every fifteen minutes until ten or twelve have been consumed; or one-quarter grain tablets, one every half hour for four doses. Calomel should always be followed in a few hours by a mineral water or salts of some kind to prevent its remaining in the system.

When there are any feverish symptoms with the cold, as headache, flushed cheeks, skin dry and hot, etc., a hot mustard foot-bath will draw the fever down from the head and promote free perspiration. After the foot-bath, tuck your patient in bed with hot water bags and give him a hot drink of any kind, heat being the principal object; either milk, bouillon, or lemonade. In the morning a cold sponge over arms and chest, and a generous dose of mineral water, will often be the final touch necessary to drive the cold out of the system. Camphor taken in some form at the very beginning of a cold is most helpful; it can either be taken in camphor pills, in the rhinitis tablets which contain a good deal of camphor, or spirits of camphor, ten drops on a lump of sugar.

Five or six grains of quinine, taken at bedtime, and again in the morning, is also of great service in some cases in the commencement of a cold.

Tonsilitis. Inflammation and swelling of the tonsils, or an ordinary sore throat, will often disappear with the use of a gargle made of peroxide of hydrogen mixed with water, equal parts of each, used freely every one or two hours. Iodine, glycerine and water equal parts is a splendid gargle to use every hour. Touching the tonsils with a cotton swab dipped in iodine helps greatly to reduce the inflammation. Douching or spraying out the throat with hot salt solution as described in chapter VIII also gives great relief.

During an attack of tonsilitis the diet should be very light. Sometimes it is necessary to touch the tonsils with an astringent, but that would come under the doctor's treatment. A cold pack made by wringing a handkerchief out of ice cold water and applied to the throat at bedtime, a small mustard paste or an application of capsicum vaseline, helps to draw out the inflammation. Little pieces of ice mixed with glycerine, and allowed to melt in the mouth, cool the throat and are very soothing. Should your patient be troubled with a disagreeable little tickling in the throat, which obliges him to cough incessantly, especially when lying down, you will soothe it very much by the use of glycerine and whiskey, or glycerine and lemon juice, equal parts, adding a little water if the mixture is too strong. This sirup is taken in little sips and allowed to go slowly down the throat. It is especially useful at night, as it may be prepared at bedtime, and kept on a table near at hand.

When suffering from sore throat the throat should be kept moist by frequent drinks of very hot or ice cold liquids (the hot drinks are best), or by using some cough drops and letting them dissolve slowly in the mouth. A simple but useful little cough mixture is made by boiling

some flax-seed and marsh-mallow root together, strain carefully, add the juice of half a lemon, and sweeten to taste.

Grip, or Influenza. During the past few years grip has become so universal in the winter season that it is well to know how to treat it when it enters the family. In the first place it has been proven beyond all doubt that it is an infectious disease, and even in some instances has been also contagious.

To prevent it from spreading through the household you must keep the patient apart as much as possible from the other members of the family, and especially guard against any one inhaling his breath or sleeping in the same room. The first symptoms of grip are, usually, severe headache, fever, often as high as 102° or 103° F., heavy cold in the head, and a very tired, depressed, listless feeling, with aches in every bone in the body. These general symptoms are often followed by various complications, as grip seems to have the faculty of attacking any part of the body that is at all weak or delicate.

If it is possible to do so, as soon as the first symptoms appear, put the sufferer to bed and keep him warm and quiet for a few days, and you will most likely be able to prevent the disease going farther. But it is not possible always to indulge in the luxury of bed, as those engaged in business often feel obliged to keep on their feet until the last moment.

A very hot tub bath at bedtime is most soothing to the aching bones, hot drinks, and hot-water bags at the feet, and some counter-irritant, as capsicum vaseline, oil of wintergreen, or vaseline and turpentine rubbed on wherever there are pains and aches, will be of great assistance.

Cold compresses on the head will relieve the headache.

Seidlitz powder, citrate of magnesia or Rochelle salts should be given, and liquid diet for a day or two will be the best treatment.

If the temperature keeps up a physician should be called.

When there is intense pain in any locality, a mustard plaster will generally soothe it.

Quinine taken in two- or three-grain doses every three hours acts as a general tonic. Phenacetine and salol, two and a half grains of each in tablet form taken every three hours, is also most helpful.

Almost every one has some pet remedy he prefers to try before calling in the aid of a physician. But when the disease does not yield to simple remedies, you must perforce persuade your patient to take a holiday from business, and to spend it in bed or confined to one room for a few days under the doctor's directions. Keep the room at an even temperature and avoid excitement of any kind, the bowels opened freely every day, and a simple but nourishing diet of broth, eggs, milk in any form and other easily digested foods. A tonic of some kind helps to stimulate the appetite. For the rest, following out the doctor's orders carefully, and a complete rest of mind and body will bring about a speedy recovery. So many complications may come from even a slight attack of grip, and it so often develops into bronchitis or pneumonia, that you cannot be too prompt at the outset in checking its course.

Even when there is no complication, after a severe attack the system is liable to remain weak and delicate for months. Grip, in the case of old people, is especially dangerous, and frequently ends in pneumonia or heart failure. For this reason the necessity for preventing the disease or stopping it in the very beginning cannot be too strongly enforced.

Bronchitis. Some of the first symptoms that appear in a case of bronchitis are, chill, fever, oppressed feeling in the chest, irritation in the bronchial tubes, which causes paroxysms of coughing, aching limbs and head, and a restless, nervous condition of the whole body. When these symptoms appear, a physician should be summoned, and his directions carefully carried out.

One of the important things to be watched during an attack of bronchitis is the temperature of the room, which should be kept as even as possible, and never allowed to fall below 68° F. A moist atmosphere is of great assistance, and this can be accomplished by a kettle of water kept boiling in the room night and day.

Give light but nourishing food every two or three hours, such as milk, eggs, oysters, etc., and during convalescence feed the patient well. Be sure and keep the feet very warm, with hot water bags and bed socks, as cold feet will increase the tendency to cough. At the beginning of the attack a mustard foot-bath will be found most soothing and restful and also plenty of hot drinks.

During the first few days there is generally a paroxysm of coughing in the very early hours of the morning, because during sleep mucus is apt to collect in the bronchial tubes, and cause a great deal of irritation. In order to ease the coughing, raise the head and slip two or three pillows under it, give a drink of hot milk with a dessertspoonful of glycerine. Inhaling steam from a kettle also gives the greatest relief, and it can easily be managed by surrounding the spout of the kettle with paper, widening it out at the upper end to cover the mouth completely, then forming a tent over the patient's head with a sheet and letting him inhale the steam slowly and carefully, see page 104. Mustard plasters relieve the oppression on the chest.

Talking more than is necessary should not be allowed, as it irritates the bronchial tubes. Should the doctor order poultices of any kind, make them very light, so that they will not weigh heavily on the chest.

Pleurisy. One of the principal symptoms of pleurisy is a sharp pain in the side, which is felt with every breath. The disease generally starts with a chill, followed by fever, and there is a frequent dry cough. The respiration increases very rapidly.

While awaiting the physician's arrival, apply a linseed poultice or mustard paste over the seat of pain. The physician will prescribe a regular course of treatment, and the same general rules for nursing are to be followed, as in cases of bronchitis or pneumonia.

A tight strapping with adhesive plaster over the ribs is frequently used by physicians and gives great relief. Should the physician prescribe poultices, mustard paste or hot fomations follow the directions given in chapter VIII.

A circular ice-bag filled with small pieces of cracked ice is also of service in reducing the temperature or soothing the sharp pain.

Pneumonia. Pneumonia is generally, but not always, ushered in with a chill, high fever, with headache, and pain in the chest after coughing. The breathing is rapid, and the pulse gradually rises, accompanied by intense restlessness and nervousness.

Absolute rest is most important; so, too, is freedom from all care and worry. The bed must be comfortable and well made, see directions in chapter I.

A sponge bath daily is a necessity to keep the body in good condition.

The mouth must be most carefully treated to prevent further infection; it should be rinsed out after every feeding and the gums and teeth cleansed with a cotton swab dipped in boric acid four per cent.

The room must be kept cool, at about 65° F. So long as the fever is high keep the patient as quiet as possible; no visitors should be allowed without the physician's permission. A fluid diet, given every two hours in small quantities, is necessary while the temperature remains high. The stomach is often weak in pneumonia, and different preparations of milk and broth have to be tried to ascertain what can most easily be retained. Ask the physician to make out a diet slip.

Give the nourishment either very hot or ice cold, as anything lukewarm is very nauseating.

Milk and cream, milk-sugar, hominy, rice, raw, or coddled eggs, broths and various milk preparations as matzoon, buttermilk, etc., form the best diet. Broths are good, especially chicken and mutton, also beef juice.

Drinks of water must be offered frequently to the patient; every hour is not too often. Water is of great value in keeping the mouth and tongue moist, and helping the action of the bowels and kidneys.

Frequently in the night, after the fever breaks, there will be a profuse perspiration, and the night clothes become cold and clammy with moisture. Remove all the damp clothes, rub your patient quickly with warm towels, and put on fresh clothes well aired and heated. Nourishment is needed during the night, and especially in the early morning hours, when the vitality will be found very low. It is wiser to waken your patient for nourishment than to allow him to continue sleeping when he is in a very weak condition. Keep his head low, and on no account allow him to get out of bed without the physician's orders, for fear of heart failure.

Open air treatment brings splendid results in pneumonia, in stimulating, and toning up the nerves and vital centers. A bed arranged on a sleeping porch (as described in chapter I) is by far the best; when that is not possible, windows should be opened wide or entirely removed out of their frame; while the bed is well protected from draughts.

If the temperature rises above 105° F. ice cold baths are sometimes given, and in some cases they have had a splendid effect, but as a rule they are only resorted to in most extreme cases. Frequent sponging with alcohol and water, and very light covering will help to reduce the fever, also plenty of cold water to drink.

Chest compresses are used by many physicians; made

of linen folded and fitted to spread over the entire chest; covered on both sides by thin flannel. The linen is wrung out of water at a temperature of 60° F. One fold of flannel is placed directly over the skin, the other over the compress. About every hour it is necessary to change the compress while the temperature remains high.

Recovery depends greatly on faithful nursing and constant care. The physician's orders must be strictly obeyed; and it will assist him very materially if you keep a record of the case, note the temperature, pulse, and respiration every three hours; the character and frequency of the cough and expectorations; amount of food taken, character of stools, and quantity of urine passed in twenty-four hours; and any special symptom that may show itself during the physician's absence.

During convalescence, fresh air is of great value, day and night.

SUMMARY

Prevention of coughs and colds.

Precaution against taking cold; use cold water.
Plunge bath, or sponge bath braces up system.
Breathing through nose not mouth.
Damp skirts, and shoes changed immediately.
Dip feet in cold water, dry quickly, when cold.
Keep passages of nose and throat clear.

Care of coughs and colds.

Simple remedies to be tried.
Good cathartic, castor oil, calomel, etc.
Hot mustard foot-bath to reduce fever.
Put patient to bed, hot drink, hot water bag.
Cold sponge bath in morning. Camphor good.

Tonsilitis.

Peroxide of hydrogen, good gargle.

Also iodine, glycerine and water.
Touching tonsils with iodine helpful.
Spraying and douching throat good.
Diet light. Cold pack to throat useful.
Sirup of glycerine helps tickle in throat.
Keep throat moist, hot and cold drinks.
Flaxseed and marshmallow mixture.

Grip or Influenza.

Infectious disease. Keep patient from other people.
Symptoms: headache, fever, cold in head.
Depression, body aches all over.
Treatment, bed when possible, hot tub bath, hot drinks, hot water bags.
Counter-irritant to relieve aching limbs.
Cold compresses on head.
Cathartic, liquid diet.
Doctor called if temperature increases.
Temperature of room to be kept even.
Follow doctor's orders, complete rest of mind and body.
Complications often follow, so care is required.
In case of old people especially dangerous.

Bronchitis.

Symptoms: chill, fever, paroxysms of coughing, nervous condition of body.
Treatment, send for doctor. Temperature of room important.
Moist atmosphere good.
Diet nourishing, feed patient well.
Keep feet warm; cold feet increases cough. Mustard foot-bath good.
How to control cough in early morning.
Pillows, hot drinks, steam, mustard on chest.
Talking not allowed. Poultices.

Pleurisy.

Principal symptom, sharp pain in side.
Poultices or plaster while awaiting doctor.
See directions in chapter VIII.
General rules for nursing followed.

Pneumonia.

Symptoms; chill, fever, headache, pain in chest after coughing.
Rapid breathing, restlessness, nervousness.

Nursing.

Absolute rest important.
Comfortable bed.
Sponge bath daily.
Care of mouth important.
Temperature of room low. No visitors.
Fluid diet, nourishment very hot or ice cold.
Milk preparations best. Broths and beef juice.
Quantity of water to drink important.
Water of great value.
How to care for night sweats, when fever breaks.
Nourishment at night. Keep patient's head low.
Open air treatment splendid.
Out-door sleeping bed (see chapter I).
Ice cold baths in extreme cases.
Frequent sponge baths.
Chest compresses used. How to make and apply them.
Faithful nursing important.
Keep record for doctor.
Fresh air day and night.

CHAPTER VII

OBSERVATION OF SYMPTOMS IN THE NURSING OF CHILDREN

Observation of symptoms in children. At all times children require a great deal of patient care and watchfulness. But especially when they are ill, it is necessary to combine with patience both tact and sympathy.

Children under four or five years of age are quite unable to describe their symptoms, and, indeed, older children very often cannot explain where exactly the trouble lies, or how it affects them. It is especially requisite, therefore, in dealing with children (though also of great importance with older people), that we cultivate the habit of observation; and the eye can very soon be trained to notice signs of illness, especially in those we love.

Significances of a child's cry. "Soft infancy that nothing can'st but cry," is very clearly illustrated when a child is sick, but even the manner in which a child cries is quite suggestive as to where the pain lies.

Crying immediately after coughing shows that the cough has caused pain in the chest.

Incessant crying in a very young child is a sure indication of pain or hunger. If from hunger, the child will stop crying as soon as he is fed.

When there is pain in the ear the child will frequently put up his hand to his ear.

When there is pain in the abdomen the cry will be very loud, and the child will draw his little legs up against the abdomen.

Sharp screams at intervals, followed by low moans, are a sign of brain disease.

Illness indicated by position. A great deal can also be observed by watching the child sleep. The position he takes in bed is very suggestive, as he will unconsciously assume the position that gives him the greatest relief from pain. In lung troubles, the child will lie on the side affected, so that the air will have a better opportunity to enter the well lung, and thus enable him to breathe more comfortably.

Knees drawn up against the abdomen during sleep, and a twitching of the upper lip, often indicate peritonitis.

When suffering from colic, a child will turn over and lie on his stomach. Frowning and a continuous contraction of the eyebrows accompany pain in the head. Restlessness and twisting of the eyelids, while the thumb is flexed in the palm of the hand, is a beginning of convulsions.

Should a child complain frequently of headache, after he is old enough to commence studying, while his general health seems to be all right, you will often find that there is some affection of the eyes, even though the sight may not appear to be troubled. Dark rings under the eyes come sometimes from imperfect circulation.

If a very young child keeps putting his hand to the ear, head, or throat, it often means inflammation or irritation of some kind in that locality. Many of these symptoms apply to grown-up people as well as children, but as a rule they can explain to you where the trouble lies and can describe the symptoms; while a child has to be treated almost altogether from observation, and it is of inestimable value to the physician, in making his diagnosis, if the mother, sister, or aunt, as the case may be, will note any little change or new symptom that appears during his absence.

Children are so often frightened or nervous while a

doctor is making his visit that they seldom appear as natural as when alone with familiar faces.

"First-aid remedies." Should the stomach or liver be out of order, you may tell it at once by looking at the tongue, as it will appear to have a yellowish white coating at the back and down the middle.

A slight sore throat often comes from indigestion, and will soon disappear after a good dose of medicine.

It is a safe rule to follow, that, as soon as a child shows any symptoms of illness, such as sick stomach, diarrhea, cough, accompanied by listlessness or irritability of temper, to put him in a good hot bath, and then to bed for a few hours, giving him a dose of castor oil or calomel. By doing this you will often be enabled to ward off an attack of biliousness, croup, or other ailment. If there is any concealed rash, the hot bath will help to bring it out and will reduce the feverish symptoms.

A child's temperature goes up to 102° to 103° F. with very little provocation. Sometimes constipation or indigestion will send it up rapidly in a few hours.

Proper care of a child. To keep a child in good health, very regular habits should be formed, as regards his sleep, food, daily bath, regulation of the bowels, and outdoor exercise.

It is a mistake to suppose that children will become hardened by exposure to cold; on the contrary, a great deal of sickness will be prevented by dressing them with a flannel garment next the skin, both winter and summer.

Many of the ills of childhood arise from improper food, causing various intestinal disturbances. Gastro-intestinal irritation frequently leads to convulsions in young children.

When any particular form of food disagrees with a baby, he will lose weight, become restless, and often cry incessantly from pure hunger.

Constipation. If children are troubled with constipa-

tion, every effort should be made to overcome it by establishing regular habits. A very gentle massage over the left side of the abdomen, with a little vaseline on the hand, for eight or ten minutes twice a day after meals; or a small suppository made of Castile soap slipped into the rectum right after breakfast, will be of great service in overcoming this difficulty. Outdoor exercise, oatmeal porridge, bran, given before meals mixed in water (or sprinkled on the cereal), plenty of cooked fruit and orange juice, will be found of assistance in promoting a regular action of the bowels every day.

The daily bath is of great importance to a child, and should be given either before breakfast or at bedtime. As a child's skin is very sensitive and easily chapped, it must be dried very thoroughly, especially in all crevices, and a simple baby powder used to prevent moisture.

A very young child's mouth should be washed out after feeding, with a weak solution of boracic acid.

Wind colic. Wind colic is one of the baby's first troubles. To cure it, keep him very warm near the fire, lying on his stomach. Give him some peppermint and hot water, and rub the abdomen gently in a circular direction.

Croup. This disease, so much dreaded by mothers, sometimes appears without any warning, and almost invariably at night. The child wakes with a peculiar hoarse cough, which once heard is never forgotten. The breathing is labored and long drawn out, with a little whistle in every breath. In severe cases while awaiting the doctor a hot bath should at once be prepared, or if that is impossible, a mustard foot-bath, to relieve the spasms and promote a profuse perspiration. After the bath wrap the child in a blanket, put him to bed, wring a flannel cloth from very hot water, and apply it to the throat, changing it every three minutes to keep up a steady heat. Give a teaspoonful of sirup of ipecac, repeating in half an hour

to cause free vomiting, and a simple soap-suds enema (see page 123) to relieve the bowels.

Steam is of great service in croup, to relieve the throat. A croup kettle may easily be arranged. Make a large cone with cardboard or stiff paper, fit it over the spout of a kettle full of boiling water, and place the kettle on a little alcohol or electric stove close to the bed. A croup tent may also be made at home, by covering an umbrella, or a screen with an old blanket, and then a sheet; pin the sides down well around the head of the bed. The spout of the kettle is pushed in between the pins in the sheet above the head of the child, but far enough out of reach so that he cannot touch it. A second blanket should be thrown over the top of the tent to absorb the moisture, and great care taken to prevent the blankets coming in touch with the stove.

Should the child be subject to croup, you can frequently ward off an attack by giving a dose of castor oil in the afternoon, as soon as any symptoms of cold appear in the system. Protect the child well from draughts and cold feet, and keep him on a simple diet of milk, broths, and cereals for a few days.

In the case of membranous or true croup, the membrane forms quickly across the throat and is exceedingly dangerous. The temperature may go up to 104° F., and great exhaustion is evident. A physician should be summoned at once, for if the child is unable to cough up the membrane, it must be forcibly removed, and sometimes an operation for intubation, or tracheotomy, will be found necessary to save the child's life.

Convulsions. Convulsions arise from various causes, and may be either a symptom of a disease not fully developed, a complication in some severe illness, or they may be caused by indigestion, teething, or other diseases. When they occur in adults, it is almost always in connection with some severe illness or in poisoning cases. When

convulsions are caused in children by some irritation of the stomach or bowels an emetic should be given, followed by an enema.

A hot mustard bath or pack is the best remedy, while awaiting the arrival of the doctor.

One tablespoonful of mustard to a gallon of water (mix the mustard first in cold water then add to the bath of hot water) the temperature of the bath about 100° F. The water should be deep enough to cover the child up to the neck, and the bath last about ten minutes. Then the child is dried gently and rolled in blankets.

To give a mustard pack, allow one tablespoonful of mustard to one quart of water, dip a towel in this mixture, wring it out and wrap it around the child, covered with a blanket. The physician will probably prescribe some soothing medicine, and the child must be kept warm and quiet.

When convulsions occur during teething, lancing the gums will give instant relief.

Diarrhea. Though not a disease of childhood, diarrhea is more serious in a child than in an adult, as the child is quickly exhausted with the continuous strain on the system.

A very slight cause will bring on diarrhea, especially in delicate children, and during the warm weather, if not checked it may very easily turn to dysentery. The first and most important symptom of dysentery is the appearance of blood and mucus in the stools, with severe griping pains. A physician should be at once summoned, as prompt treatment is necessary to check the disease. Rapid change of temperature or diet is sufficient to start diarrhea, especially when there is want of care or knowledge in the treatment of a child with such a tendency.

Keep the child scrupulously clean, especially during the hot weather, give him plenty of fresh air, and guard against his taking cold while bathing, or lying without

covering at night. This care, in addition to the boiling all the water he drinks, will be of great assistance in preventing an attack. As soon as the diarrhea appears, a dose of castor oil is the best remedy to remove any irritating substance that may have caused the trouble. It is wiser not to check the diarrhea immediately, but if it does not stop after the oil has acted, a little bismuth powder will help to stop it. When it is possible to do so, keep the patient in bed until the diarrhea ceases. Burnt brandy helps to relieve the pain and is also slightly constipating. The best diet is boiled milk and arrowroot. Flour and water whipped to a thick cream, a teaspoonful taken every hour, is useful in stopping the disease, and sometimes a starch enema is necessary, but must never be given without the doctor's orders. Hot stupes or dry heat applied to the abdomen will be found very soothing. In the case of a child, if the temperature should rise very high, a cold pack will help to reduce the fever immediately.

If the diarrhea shows no sign of disappearing after a few hours, the physician should be summoned.

Gastric catarrh. Very often about holiday time, or after any especial festival, it is not unusual for a child to have an attack of gastric catarrh or, as it is generally called, a bilious attack, caused by eating too many rich dainties. If this is not checked at once, it may develop into bilious fever.

The symptoms are, a heavily coated tongue, offensive breath, nausea, sometimes accompanied by vomiting, languid feeling, headache and fever. The temperature sometimes rises to 103° F.

A good dose of castor oil should be given immediately. Then put the child to bed and sponge him off with alcohol and water.

Nothing but milk, broths, and cereals should be allowed for a few days, and great care should be taken to prevent him from contracting cold.

Falls or blows upon the head. Children frequently receive a blow on the head by a fall or other accident. If the blow is severe enough to cause unconsciousness, a doctor must be sent for at once. While awaiting his arrival, take the child into a quiet room, unfasten the clothing around the neck, apply ice-cloths to the head, and hot water bags to the legs and feet; but on no account give any alcoholic stimulant. If the stomach is not nauseated, a drink of hot milk will be reviving.

In some severe cases days may elapse before the child regains consciousness, and during that period nourishment must be given in the form of nutritive enemata.

St. Vitus' dance. This trouble is confined almost altogether to children with a highly nervous temperament, and to overcome it a great deal of patience and careful watching are required. Plenty of sleep is an absolute necessity, and when the nerves are too excited to allow of natural sleep, hypnotics must be resorted to. A quiet, easy life should be followed, with simple amusements and plenty of outdoor exercise, light but bountiful diet, without meats or stimulating foods, and a free action of the bowels daily. A shower bath or brisk sponge bath every morning, commencing with lukewarm water, and gradually making it colder, and gymnastic exercises to strengthen the muscles, are very beneficial.

A child should always urinate at least once in every six hours, and nervous children who cannot control the urine, especially at night, should not be punished, but taught as far as possible the power of self-control, and be treated by the family physician.

Loss of weight is sometimes one of the first signs of ill health in children, and it may be well to have them weighed often, especially when they are growing very rapidly.

Do not move sick children more than is necessary; it is a mistaken idea that it is wise to take them out of bed

and rock them in your arms when they are suffering from pneumonia or other diseases. There is great danger of fresh cold, and besides that, children are so easily excited, and their temperature goes up so rapidly with the slightest cause, that the quieter you can keep them when sick, the better.

SUMMARY

Observation of symptoms.

Many children unable to describe symptoms.
Habit of observation to be cultivated by nurse.
Crying after coughing, indicates pain in chest.
Incessant crying means pain or hunger.
Child's hand held up to ear, indicates earache.
Pain in abdomen, cry loud, legs drawn up.
Sharp screams, and low moans, signs of brain disease.

Illness indicated by position.

Child assumes position that gives greatest ease.
Lung trouble, child lies on side affected.
Knees against abdomen, twitching of lips in sleep, symptoms of peritonitis.
Colic, one symptom, child lies on stomach.
Restlessness, twitching of eyelids, symptom of convulsions.
Headaches often due to affection of eye.

First aid remedies.

Sick stomach, diarrhea, coated tongue; give castor oil, hot bath, put child to bed.
Child's temperature rises with small cause.

Proper care of child.

Form regular habits, in sleep, food, exercise, bath.
Importance of flannel underwear.
Improper food, the troubles it causes.

Constipation.

Try to overcome by forming regular habits.
Massage, suppository of Castile soap.
Diet to include oatmeal, bran, fruit, etc.
Daily bath important.

Wind colic.

Warmth important. peppermint and hot water.
Rub abdomen.

Croup.

Peculiar, hoarse cough, breathing long, whistle in breath.
Treatment; hot bath, mustard foot bath.
Hot flannel stupes to throat. Ipecac.
Simple soapsuds enema.
Steam of great service, croup kettle, and how to make it.
Croup tent.
To prevent croup, give castor oil when symptoms first appear. Simple diet.
In membranous croup send for doctor.
Operation sometimes necessary.

Convulsions.

Arise from various causes.
Treatment, hot mustard pack or bath while awaiting doctor.
How to prepare the bath. Mustard pack directions.

Diarrhea.

More serious in child than adult.
Often turns to dysentery, send for doctor.
Keep child clean, fresh air, guard against cold.
Boil drinking water.
Do not check diarrhea at once.

Keep patient in bed.
Diet, boiled milk and arrowroot.
Hot stupes and dry heat to abdomen.

Gastric catarrh.

Symptoms, tongue coated, breath offensive, vomiting, headache, fever, temperature.
Treatment, castor oil, put child to bed, alcohol sponge.
Diet; milk, cereals, broths, guard against taking cold.

Fall or blow on head.

Send for doctor, take child into quiet room, unfasten clothing.
Ice cloth to head, heat to feet.

St. Vitus' Dance.

Extra amount of sleep needed.
Sleeping powders sometimes ordered.
Quiet life, out-door amusements, simple diet, free action of bowels daily. Cold bath mornings.
Loss of weight, sign of ill health.
Do not move sick children, keep quiet in bed.

CHAPTER VIII

COUNTER-IRRITANTS. DOUCHES. ENEMATA

Poultices. Should your patient suffer locally, from pain, caused by inflammation or congestion, the doctor may order some kind of counter-irritant, to be applied to the surface of the body to relieve the pain by reducing the inflammation. We will here discuss only the simpler forms of counter-irritants that a Home Nurse may be called upon to administer.

Linseed poultices. Linseed poultices are more frequently used than any other kind of poultices, and it is very necessary to know exactly how to make them; they should always be very hot, light and moist; never try to make them unless the water is really boiling. Between one and a half and two cups of water is enough for an ordinary-sized poultice. As soon as the water boils, take a large spoon in one hand, and in the other a handful of meal, shake the meal into the water, at the same time stirring briskly. When it is as thick as a good batter, and evenly mixed, it is ready for use. A little mustard may be added, or any other medication that has been prescribed. When mustard is added to a linseed poultice, for an adult, use two tablespoonfuls of mustard to every cup of linseed; for a child, one tablespoon to a cup. The mustard should first be dissolved in cool or lukewarm water; and only added to the poultice after it has been taken from the fire. Never use hot water when mixing mustard, as the heat kills the ferment in the mustard, and prevents the oil being freed to cause irritation.

Pour the poultice out evenly on a piece of old linen or

muslin, which should be twice the size needed for the poultice, so as to leave a large margin to turn up all around. After turning up the edges, put in a few stitches around the sides — if you have a needle and thread ready it will not take a moment — then you may be absolutely certain that the poultice will not fall to pieces and cause your patient great discomfort. Never make a poultice too thick; it is far better to make it thin and change a little oftener than to have a heavy weight resting on a sensitive part of the body. One teaspoonful of bicarbonate of soda, well beaten into the poultice, just before pouring it out will make the poultice lighter in weight. When a poultice has to be carried any distance before being applied, up a flight of stairs or through a cold hall, cover it with a piece of flannel or put it between two hot plates, as it should be applied as hot as your patient can endure it.

Applying a poultice. Great care must be taken not to burn your patient with a hot poultice; put it on very slowly, lifting it up two or three times before you finally allow it to remain on the skin.

Poultices need to be changed about every hour, as they cause more harm than good if allowed to get cold and chill the patient. When changing a poultice be careful not to uncover your patient more than is absolutely necessary to make the change quickly. Wipe the moisture from the skin each time before applying a fresh poultice; and, when the skin is red, rub on a little vaseline before the fresh poultice; and if you cover the poultice with a thin layer of cotton wool, and place over that a piece of oil silk, it will retain its heat for a full hour. When applying a poultice, a bandage about ten inches wide should be firmly pinned round the body to keep it in place. There is always danger of the patient taking cold after poultices have been applied for any length of time, as they tend to make the system very susceptible, so that when they are

no longer necessary, put an extra covering of cotton wool (cotton batting quilted between two pieces of gauze) or flannel for a few days over the spot where the poultice has been.

Mustard paste and mustard leaves. Mustard may be applied either in the form of a regular mustard paste, or you may buy a package of mustard leaves from any druggist all ready for use, and they are very convenient (especially when traveling), being easily carried, and applied by moistening the leaf with warm water, and placing a thin piece of muslin or gauze between the leaf and the skin. Vaseline or oil must first be rubbed on the skin and the leaf left on only about fifteen minutes, some skins are very sensitive and the mustard leaf ought to be lifted at the end of five minutes for fear of a blister. After the mustard leaf is taken off, wash the skin carefully with soap and warm water as small particles of mustard remaining will surely result in a blister.

Mustard paste. The ordinary mustard paste is made by using flour mixed with mustard, making the application any strength required. For children it is wiser to use six or eight teaspoonfuls of flour to one of mustard, as their skin is very tender and sensitive; but for an adult three or four teaspoonfuls of flour to one of mustard is about the right strength, only as formerly stated, the oil in the mustard will not be properly released if the mustard is mixed with hot water; and therefore to get the full strength of the mustard, cold or barely lukewarm water must be used. Mix the flour and mustard together, then add the water slowly until the paste is smooth and about the consistence of thick cream.

Applying mustard paste. Spread the paste upon a piece of old linen or gauze, leaving at least four or five inches on each side to turn up over the paste. Cover the outer side with a large fold of gauze or a small towel, and apply the inner side to the patient's skin. If you lay the

mustard plaster on a very hot plate or against a hot water bag for a few moments before applying it, you will prevent the disagreeable sensation that is caused when the plaster is applied cold. Using white of egg instead of water when mixing the mustard removes some of the danger of blistering, and this danger may also be guarded against by rubbing the skin with vaseline before applying the plaster. A mustard paste does its work very quickly and should be removed as soon as the skin is a bright red color. Never allow your patient to fall asleep with the paste on, or a blister may be the result. A little vaseline or sweet oil on a piece of linen should be applied after the paste is removed.

Plasters. Plasters are ordered when a strong counter-irritant is needed to draw out the inflammation from some part of the body. Before applying a plaster wash the skin carefully with soap and water, rub with alcohol, and dry thoroughly. Apply the plaster and cover very loosely with a bandage, leaving plenty of room for the skin to rise with the blister. After about five or six hours, remove the plaster gently, taking care not to break the skin. Do not prick the blister, unless under the doctor's orders; as a rule, it is now considered best to allow it to remain unbroken; apply carefully a dressing of boric acid ointment or a sterilized gauze compress, very loosely.

Hot stupes. Moist heat is of great service in reducing inflammation and it may best be applied in the form of hot stupes. These stupes are made about eight or ten inches square, from a piece of flannel or old blanket. In order to wring them out of the hot water without burning the hands, have a towel ready, folded lengthwise; catch the hot stupe by one corner, drop it into the towel, wrap it up tightly, and twist the ends of the towel in opposite directions until squeezed dry. Then carry it to the bedside, but do not remove the hot stupe out of the towel until ready to apply, as it cools very rapidly. Apply slowly

as with a poultice, for fear of burning your patient. Cover over with cotton wool or a piece of flannel, and oil silk to retain the heat. Flannel stupes must be changed every ten or fifteen minutes to keep up an even temperature, then wipe the skin dry and apply a pad of cotton or soft flannel.

Turpentine stupes. Turpentine does not mix well with water, and requires a little oil to guard against causing a blister. The best way is to mix one part of turpentine to two parts of oil (one to eight for a child), then with a piece of cotton rub this mixture well over the skin and immediately put on the hot stupe. When applying a hot stupe to the breast, cut a small hole in the center of the flannel, for the nipple, because it is not wise to cover it with the hot stupe.

Hot compresses for the eye. Hot compresses are composed of small pieces of absorbent cotton about two inches square; the water as hot as 115° F. Squeeze out the tiny compress with your fingers, and change every two minutes.

You may keep the water hot over a tiny alcohol lamp or gas stove, or have boiling water in a pitcher, ready to add to the basin. From twenty to thirty minutes is the usual length of time to apply the eye compresses. When there is a discharge from the eye, the compress should never be used more than once; have a number on hand in a basin, and burn the old one as soon as you take it from the eye.

Dry heat. When dry heat is required **flannel** may be heated in the oven or against a hot brick or iron, and applied as hot as can be borne.

Bags of salt warmed in the oven are also of great use when dry heat is required. The bags should be covered with flannel.

Hot water bags are also serviceable in applying dry heat. The bag should be only half full, and all the air

pressed out before putting in the stopper; screw on the top very firmly and place the hot water bag in a flannel bag, covering the neck and stopper. One cause for the leakage of hot water bags is that the little rubber washer around the stopper gets worn out and needs renewing frequently. Hot water bags may be bought of all sizes, from the tiny rubber ones, three or four inches long, which are so useful in faceache or earache, to the large ones holding two or three quarts.

Circular aluminum hot water cans are invaluable; they retain their heat for hours and are not liable to be destroyed as quickly as the rubber ones.

Electric pads are now used extensively when dry heat is required. Care must be taken in using these pads that the electric power is turned off when the pad is sufficiently warm — also that the wire tubing is kept in good order, so that the insulation may remain perfect or the bedclothes may be set on fire.

Iodine. Iodine is a good counter-irritant; Churchill's iodine being the strongest kind. It is applied with a camel's hair brush or cotton swab. When the skin is very sensitive and the iodine is likely to cause a blister, it may be removed with alcohol.

Oil of wintergreen is another counter-irritant, especially in cases of grip when there are pains in the limbs and back from cold. It should be rubbed in rather lightly at first and repeated in a few hours.

Equal parts of **turpentine and vaseline** are useful especially when there is a heavy cold on the chest. Melt the vaseline over the fire or lamp and mix in the turpentine. When applying any of these liniments, protect the clothing from coming in contact with them, as the oil contained in them leaves unsightly stains.

Ammonia when used for a counter-irritant is poured upon a piece of gauze or absorbent cotton and laid next the skin. Cover with oiled muslin and a gauze dressing.

After about five minutes, take it off, otherwise you may have a blister.

Antiphlogistin. Great relief is given to pain caused by congestion, by the use of antiphlogistin. When ordered by the doctor; take the paste and spread it upon muslin or gauze, then put your poultice on a tin plate and place it in a warm oven to heat. Another method, is to put the antiphlogistin into a double boiler and heat it thoroughly before spreading upon the gauze or muslin. A hot water bag should be placed over the poultice after you have bound it on your patient, as continuous heat is required to prevent the paste becoming hard and dry.

Cold applications. In some forms of acute inflammation, cold applications are indicated instead of hot. **Ice-coils** are often used on the head or abdomen, but they are troublesome to manage and, as a rule, **ice-caps** are used instead outside the hospital. In filling an ice-cap the ice must not be cut too small (pieces about the size of a walnut are best), or it will melt away very quickly, and a piece of linen or gauze must always be placed between the ice-cap and the skin, so that the cold will not be too intense. Never fill an ice-bag too full, or the weight of it will do more harm than good. You must also bear in mind that ice-caps lose their utility if allowed to get warm, so they must be changed as soon as the ice melts. Paper ice-caps (made from Japanese paper) are frequently used if a rubber ice-cap is too expensive and if the treatment is only for a few hours they answer the purpose well.

Cold compresses of old linen, gauze or muslin are of infinite value in cases of nervous headache, sore throat, or intense fever or delirium. The best way to manage them is to put a large piece of ice into a basin, pour a little alcohol or bay-rum over it, and lay pieces of linen on the ice, when they will become cold without being too wet. Any one subject to headaches knows how uncomfortable it is to have a cold, wet cloth on the head that drips down

at each corner into the ears and down the back of the neck. This can be entirely avoided by placing the compresses on ice instead of in water.

Douches. Douches both external and internal are used to reduce inflammation and congestion.

Ear douche. Spraying or douching the ears is a very delicate proceeding and must be done most carefully; as a rule the doctor will prefer to attend to it in the absence of the trained nurse, but occasionally it may be necessary, in an emergency, for the Home Nurse to take it in hand. The following rules are important:

Boric acid solution or salt solution is generally used, temperature about 100° F. (if there is much pain a little higher temperature can be used). The irrigation bag must hang above the patient's head, and the nurse must be careful that all the gas is expelled from the long tube and solution run through it before the nozzle is inserted into the ear. Fasten a towel around your patient's neck and shoulders; and have a small basin held against the neck, under the ear. Another point to be noted, do not push the nozzle up too far into the ear, as it will prevent the solution coming out properly; a clamp is necessary on the rubber tubing to control the flow of water; if allowed to enter too rapidly the drum of the ear will suffer. The ear should be well dried out with absorbent cotton; a small pointed swab of the cotton gently inserted into the ear will absorb all the moisture in a few seconds. Do not leave any cotton in the ear unless ordered by the doctor.

Douche for the nose. The same appliances are required for douching out the nose. The patient must keep her mouth open and breathe through the mouth, not the nose. The solution when gently inserted up one nostril will run out the other; only a very small quantity of solution is used at one time, and it must be hot; about 105° F. The syringe bag should be only a few inches above the patient's head, so that the solution may run slowly.

Your patient must hold her head forward, and try not to swallow during the irrigation; also, if one nostril is stopped up (as in a heavy cold) insert the solution into the other nostril first, and it will work out the obstruction, instead of driving it up into the tube leading to the ear. This douche also is a very delicate matter, and may only be used with extreme care.

Douche for the throat. During an attack of tonsilitis, great relief to the congestion in the throat may be had by douching the throat with very hot salt solution, every two or three hours. The same rules apply as for douching the nose and ears. The patient must bend her head well over a basin to allow the solution to run out by mouth. Move the nozzle of the syringe from side to side, so that all parts of the throat may be reached.

Vaginal douches. Vaginal douches must always be taken lying flat on the back, so that the water may reach the inflamed parts. A glass nozzle is the best to use, as it may be boiled before every douche, and so kept perfectly clean. A fountain syringe and granite douche-pan are necessary. Any medication ordered by the physician ought to be well mixed in a pitcher before being poured into the syringe-bag. This is especially to be noted in the use of carbolic acid, as the oil in the acid requires very hot water to dissolve it, and if it is not thoroughly mixed, will burn the patient. It should, therefore, stand for about twenty minutes before being used.

For cleansing purposes either normal salt solution or boric acid solution two per cent. is used.

The douche nozzle should be boiled for about five minutes before using, and the douche-pan well warmed before inserting under your patient, a small pillow slipped under your patient's back just above the douche-pan will relieve all strain from the back.

Giving the douche. Be sure that all the air is expelled from the tube, and the solution allowed to run

through it before you insert the nozzle. The nozzle is pointed downwards and backwards and inserted very gently. Move it around while the solution is flowing, so that all parts of the inner cavity may be reached.

When the douche is finished, shut the little clamp on the tube, and remove the nozzle from your patient, while there is still some of the solution in the tube; this will prevent the entrance of gas into the vagina.

When giving a vaginal douche only one pillow is necessary under your patient's head, as her shoulders ought to be lower than her pelvis, to allow the solution to enter properly. Continue the douche for about twenty minutes; one of the chief functions of these douches, is the continuous application of heat to soothe irritation; and if given too rapidly this purpose will be defeated; for this reason the solution should run through the tube slowly.

Enemata. Enemata are used for various purposes, and every one should know how to give an enema in case of emergency, either as a purgative, stimulant, or for nutrition. There are various medicated enemata prescribed by the doctor; for removal of flatulence, in treatment of diarrhea, to expel worms, etc. Such are enemata containing turpentine, asafetida, quassi, etc., but medication does not lie within the province of the Home Nurse. The doctor will give directions when and how these medicated enemata are to be given. They are followed usually with a soapsuds enema.

Purgative enemata. Soapsuds solution to cleanse the bowels is made with the purest soap (generally ivory or castile; never use laundry soap), and about two or three pints of hot water, for an adult; for a child, one pint is sufficient. When your soapsuds solution is ready its temperature should be 105° F. for by the time the solution enters the bowels it will be much cooler. The solution is poured into a fountain syringe bag, or douche can, which is hung up about two feet above your patient. A clamp

is necessary on the rubber tubing to regulate the flow of the solution. When possible use a rubber rectal tube, and connect it with the tube of the fountain syringe by a small glass connecting tube. The soft rubber rectal tube is better than the hard rubber end supplied with the fountain syringe bag, for two reasons; it will reach up higher into the bowel, and is so soft that it will not injure the tender mucous membrane lining the intestines.

Giving the enema. Let the patient lie upon the left side, with knees drawn up (this will relax the muscles of the abdomen); protect the bed with a piece of rubber sheeting and a bath towel or cotton sheet. Turn down the bedclothes, and cover your patient with a blanket.

Allow some of the solution to flow through the tube, so that all gas may be expelled; then oil the rectal tube, and insert gently, and slowly, without pressure.

Should you feel any obstruction (probably caused by fecal matter), allow a little solution to run into the bowel, and it will be overcome. After the tube has been inserted about five or six inches, open the clamp and allow the solution to flow slowly. If pain is caused, shut the clamp on the tube and stop the current for a minute, then let it flow again. Never hurry the giving of an enema; allow about fifteen minutes; because the slower the solution enters the bowels the better will be the result. After removing the tube, press a towel against the anus. If the patient lies quiet and retains the enema for fifteen or twenty minutes, you will have a good result.

When there is a good deal of constipation the enema will be more successful if given in the knee-chest position, that is, with the patient resting on the knees and chest in bed, the head very low; also use the long, flexible rubber rectal tube on the end of the syringe. This is called a **high enema.** Adding olive oil and glycerine to the soapsuds will prove effective if the simple enema is not sufficient. About one ounce of oil and half an ounce of glycer-

ine is the usual amount. Castor oil may also be given in this way; but it is necessary to consult the doctor before using any medication besides the plain soapsuds.

Oil enemata. Sometimes the doctor orders an oil enema to be given first and retained for an hour, followed by a soapsuds enema. In that case, six ounces of hot olive oil are injected first and allowed to work slowly through the bowels before giving the soapsuds enema.

Starch enemata. In cases of acute diarrhea these enemata are sometimes ordered, and are made by mixing a dessertspoonful of starch with cold water into a smooth paste and then adding three ounces of boiling water. Boil two or three minutes, add sufficient water to make the mixture as thick as cream. It must be as cool as 103° F. before using. Sometimes a Davidson bulb syringe is found best to give the medicated enemata, as the medication can be forced through the tube better than with an irrigation bag. A small rubber catheter or rectal tube should be attached to the nozzle of the bulb syringe and inserted into the rectum.

Stimulating enemata. These are given in cases of shock or collapse, and should be very hot, as they will be more easily retained. The usual amount is one tablespoonful of whiskey or brandy, and four ounces of very hot water, as hot as the patient can stand; or salt solution, is sometimes substituted.

Hot water should be run through the syringe first, that the tube may be thoroughly heated, and the enema should be given with a long flexible rectal tube, as it must go into the upper bowel to be retained.

Nutritive enemata. When the stomach is much disturbed during a severe illness so that food cannot be digested, or in cases of delirious patients, and after some operations about the mouth and throat, nutritive enemata are given to nourish the system. They are sometimes kept up for days and weeks. Various formulæ are used; one

of the best is: Peptonized milk two ounces; one tablespoonful of whiskey, and one egg with a pinch of salt. (Peptonized milk may be made with Fairchild's tubes of peptonized powder), peptonized beef extract, or beef juice may also be used. The milk is heated, but not over 115° F., then add the beef if used, and the egg mixture, beating it up. A simple soapsuds enema once a day is necessary to wash out the lower bowel, when your patient is fed by nutritive enemata.

Enemata given to children. Children do not retain the solution from an enemata long enough to cause a proper result. It is better to place the child on the bedpan before trying to give the enema. A rubber catheter is used instead of a rectal tube, and salt solution is considered less irritating for a child than soapsuds.

SUMMARY

Counter-irritants.

Ordered to relieve inflammation and congestion.
Simpler forms, that a Home Nurse can use.

Poultices.

Linseed poultices; how to make them, hot, moist, and light.
Should mustard be added, lukewarm water used to mix it; amount required.
Applying a linseed poultice.
Bicarbonate of soda added to make it light.
Important points to be noted when applying and changing poultices.
After care of patient, to prevent taking cold.

Mustard leaves and paste.

How to use mustard leaves.
Oil or vaseline rubbed on skin first.
To prevent blisters skin washed after leaf is removed.

Mustard paste; made with flour and mustard, proportions for adult and child.
Reason for mixing mustard in cool water.
How to make and apply mustard paste.
Care against burning patient.

Plasters.

Care of skin before applying plaster.
How to apply plaster.
Care taken that blister is not broken.
Dressing after plaster is removed.

Hot stupes.

Use of moist heat.
Flannel stupes.
Method of making stupes, without burning hands.
Apply slowly, cover with cotton wool, and change every ten or fifteen minutes.
After-care of patient.

Turpentine stupes.

Turpentine does not mix well; oil used; proportion for adult and child.
How to apply mixture, followed by hot stupe.
Care to be used in applying hot stupe to breast.

Hot compresses for the eyes.

Absorbent cotton two inches square; temperature of water; how to apply.
Change every two minutes; water kept hot with stove or lamp; length of time for applying compresses.
When there is a discharge from eye never use same compress twice.

Dry heat.

Different kinds; flannel, bricks, bags of salt, hot water bags.

How to fill hot water bags; flannel bag to cover the rubber.
Aluminum hot water cans very serviceable; retain heat longer than rubber; also wear better.
Electric pads used frequently; care taken to turn off power when pad is hot; also watch insulator for fear of burning bedclothes.

Iodine.

How to use iodine.
May be removed with alcohol.

Oil of wintergreen.

For pains in back and limbs; rubbed in lightly; repeated in few hours.

Turpentine and vaseline.

Equal parts; good counter-irritant for cold on the chest.
Melt vaseline and then mix in turpentine.
Care to protect clothing from stains.

Ammonia.

Poured on gauze or absorbent cotton.
Covered with oiled muslin.
Watch every few minutes for fear of blister.

Antiphlogistin.

Spread paste on gauze, and put it on tin plate in oven to heat; or use double boiler to heat paste, then spread on gauze or muslin; hot water bag used over paste, continuous heat necessary.

Cold applications.

Ice-cap, how to fill it; gauze between cap and skin; kept cold by changing often.
Paper ice-cap takes the place of rubber when only required for few hours.

Cold compresses for head and throat; how to make and apply.

Douches. External and internal.

Ear douche, must be done carefully; rules for Home Nurse important.

Solution; temperature; bag hung up above patient's head; all air expelled from tube before nozzle is inserted; towel about patient's neck; small basin under ear; nozzle not pushed in too far; clamp on tube to regulate flow; must not run too quickly; ear well dried; no cotton left in ear.

Nose douche.

Same appliances as used for ear douche; patient to keep mouth open to breathe; insert solution up one nostril, small quantity at one time; temperature required; should one nostril be stuffed up, irrigate other nostril first; use with extreme care.

Throat douche.

For inflammation of throat, relieves congestion, hot salt solution, same rules as apply for ear and nose douche, move nozzle from side to side.

Vaginal douches.

Always taken lying down.

Glass nozzle best, boiled before every douche, fountain syringe and douche pan.

Medication ordered by doctor, mixed in pitcher before pouring into bag.

For cleansing douche, salt solution or boric acid solution two per cent. Nozzle boiled five minutes before using, douche pan warmed before inserting under patient, small pillow under back, relieve strain.

Air expelled from tube, solution run through it, nozzle pointed down, and backwards; gently inserted.

Insert nozzle slowly, move it frequently from side to side.

To prevent entrance of gas, shut clamps on tube, remove nozzle while solution is still in tube.

Head low, while douche is given; time twenty minutes, giving slowly.

Continuous heat is applied to soothe irritation.

Enemata.

Necessary to know how to give in an emergency.

Various kinds; medication prescribed by doctor.

Purgative enemata.

Soapsuds, made with purest soap, amount required for adult and child, temperature when ready.

Appliances — fountain syringe, rectal tube, glass connecting tube; soft rubber tube better than hard rubber nozzle, as it reaches higher, and will not injure patient.

How to give enema; position of patient; protection of bed; gas expelled from tube; rectal tube well oiled, inserted gently; no pressure; how to overcome obstructions; when inserted five or six inches, if pain is caused, stop current for a moment; give enema slowly, result better; patient retains enema fifteen or twenty minutes if possible.

When to use knee chest position; how to give high enema; should oil or glycerine be ordered, amount required; if doctor orders oil enema, method of giving it.

Starch enemata.

Sometimes ordered in acute diarrhea, amount used and how to mix it; temperature; a Davidson bulb syringe best for medicated enema; small rubber catheter slipped on end of syringe and inserted into rectum.

Stimulating enemata.

Given in cases of shock or collapse; temperature; salt solution or stimulant, amount required; hot water run through syringe first to heat tube; long rectal tube best, to reach upper bowel.

Nutritive enemata.

When food cannot be taken by mouth, sometimes kept up for days or weeks.

Formulæ used, how to make peptonized milk, mixing enema.

Soapsuds enema necessary once a day when nutritive enemata is used.

Enemata given to children.

Difficult for child to retain solution.

How to give it; rubber catheter instead of rectal tube; salt solution in place of soapsuds.

CHAPTER IX

HOW TO PREPARE FOR A SURGICAL OPERATION

CARE OF PATIENTS BEFORE AND AFTER OPERATIONS

How to prepare for a surgical operation. In these advanced days when surgery is used so generally and so effectually, it is almost a necessity to know something about the preparations necessary for a surgical operation at home. It sometimes happens, that a sudden emergency calls for an operation where the presence of a trained nurse is an impossibility. This chapter, therefore, will be devoted to a short description of how to provide for such an emergency, in a private family when a Graduate Trained Nurse is not available.

If the operation is to be in the early morning, have everything on hand the night before, so that neither doctors nor patient may be kept waiting. Almost every surgeon has a list of what he will require you to provide in special cases, therefore a general idea of the things that are always necessary will be given in this chapter. It is not necessary, in this little book to enter into the preparations needed for a major operation, as in that case, if a trained nurse is not available, the doctor will most likely take his patient to the nearest hospital, or else superintend the preparations himself.

Necessary appliances for an operation. The appliances required at every operation in a private house are as follows:

1 strong kitchen table (for the patient to lie on).

3 small tables (for instruments and dressings).

3 large hand basins (for solutions, sterilized dressings, etc.).
2 small hand basins.
2 large pitchers (for solutions).
1 fountain syringe.
1 bottle of alcohol.
1 bottle of bichloride of mercury tablets.
1 bottle of carbolic acid.
1 bottle of green soap solution.
2 new wooden nail brushes.
2 slop jars or pails.
1 piece of rubber sheeting.
3 clean sheets.
1 small blanket.
1 heavy blanket.
1 package of safety pins.
1 small pillow.
12 clean white towels.

Preparation of the room. In choosing a room for the operation the first consideration is light, as the more light you are able to have the better. If possible, have a room adjoining the bedroom which the patient will occupy afterward. If this cannot be, and you are obliged to use the bedroom itself, push the bed into a corner and remove all unnecessary furniture. When the operation is to be a major one, the carpet must be taken up, and the floor washed over with soap and water and 1:120 carbolic solution, before commencing the arrangement of the room. In these cases no rugs or spread will be necessary on the floor; but if the operation is a minor one, the carpet can be well swept and the room dusted with a damp cloth, and then the covering laid down over the carpet right in front of the largest window, and over that a large cotton sheet. A tack put in each corner will keep the sheet in place without injuring it.

In the middle of the sheet place the kitchen table, which

is to be covered first with a heavy blanket, then the piece of rubber sheeting pinned firmly at the four corners with safety-pins, and covered with a clean sheet. A small pillow is placed at one end, and a sheet and small blanket laid on top ready to spread over the patient.

On each side of the large table put the small ones, two at one side and one at the other, leaving room to walk between. Cover the little tables with clean white towels, and if they have polished tops, put under the towels a piece of oilcloth or rubber sheeting. A couple of plain chairs are needed in the room in case the surgeon requires to operate sitting down. On one of the small tables put two china basins, thoroughly cleansed, first with carbolic solution, 1:40, and rinsed off with boiled water; these are for washing the sponges the surgeon will provide. The third basin is for sterilized towels. One slop-jar is needed under or beside the large table, and the other near the table that holds the sponges. All utensils used should first be scoured with bon-ami, then well washed off, and rinsed in solution.

The window curtains must be either tied far back or taken down, to give plenty of light. Then fasten a small piece of thin muslin or cheese-cloth over the lower sash of the window for protection from curious outsiders. A strong screw fastened at a convenient height in the wall near the window will be needed to hang up the fountain syringe that will be filled with sterilized water, unless the surgeon requires some solution in it to irrigate the wound. A bureau or table covered with a clean towel may be utilized to hold the dressings.

The surgeon will bring the instruments, dressings, and anesthetic, and should he not bring an ether cone, one may be quickly made with a newspaper folded inside a clean towel.

The room must be about the temperature of 70° F. and well aired.

Sterilized water and towels. Plenty of boiling water will be required, and the washboiler is the best thing in which to boil it, after it is well scrubbed with bon-ami, and then washed outside and in, with hot green soap solution.

One boiler full of water should be prepared in time to cool before the operation, and a second boiler full will be required steaming hot. The water must boil for about half an hour to be well sterilized, and a sterilized towel must be tied over the top of the boiler to keep the water pure.

In these days surgeons prefer to use plain sterilized or, as it is usually called, boiled water almost entirely instead of any antiseptic solution; but if solutions are required, they can be made in a few moments when there is a plentiful supply of sterilized water. The two solutions most likely to be called for are bichloride of mercury and carbolic acid. It is well to make a 1:1000 solution of bichloride and then dilute it as required. One little bichloride tablet added to a pint of water will make a 1:1000 solution. Six teaspoonfuls of pure carbolic acid added to one pint of water will make about a 5 per cent. or 1:20 solution.

A little pure vaseline or cold cream will be needed to rub on the face round the nose and mouth of the patient, before using the anesthetic, to prevent burning the skin.

The new nail-brushes, together with a basin of 1:1000 bichloride solution, some alcohol, and sterilized towels, a basin of green soap and orange sticks to cleanse the nails; should all be conveniently placed in the bath-room for the surgeon's use. The surgeon will bring his own rubber gloves sterilized. The nail brush and orange sticks must be boiled for five minutes, and then placed in a bowl of carbolic 1:20.

Many surgeons order a can of oxygen, so as to have it on hand in case of emergency, and it should be tried be-

fore the operation to be sure that it is in working order and ready for use at a moment's notice.

The only way to prevent infection of wounds at an operation, is in the absolute cleanliness of the room where the operation is to be performed: sterilizing of all supplies, and everything that may come in touch with the patient; including the hands of nurses and surgeons.

Surgical bed. Now that the room is arranged, we will attend to the bed. For surgical cases a simple iron bedstead is always best, but this is not an absolute necessity except for a major operation. First put on the undersheet smoothly; tuck it in on all sides; across the middle of the bed place the rubber sheeting, cover with the draw-sheet, fastened under the mattress with safety pins; as an ether patient is sure to be restless and toss the bedclothes. The top sheet and blanket may be tucked in at the foot of the bed, and then turned back well down to the bottom ready for the patient. Another blanket must be placed under the top sheet, so that the patient may have some extra warmth for the first few hours. One or two hot water bags are then placed in the center and covered with a blanket, but they should be removed from the bed as soon as the patient is put in it, and not replaced until he is completely out from under the influence of the anesthetic. So many accidents have occurred with hot water bags or bottles burning a patient while unconscious, that the majority of surgeons refuse to allow them to be put in the bed until the patient is quite conscious. When they are replaced they must be carefully watched and put at some distance from the patient.

No pillow will be necessary on an ether bed, as the head must be kept very low on account of the nausea, but a towel is laid at the head, and a few extra ones will be needed, with a small basin, in case of vomiting.

The patient. Last, but not least, the patient must be ready when the surgeon arrives. The day before the

operation a thorough hot bath is given the patient including washing the hair. The surgeon will probably order a cathartic the night before, and, if necessary, an enema in the morning. As to diet, the day before the operation good nourishing food should be given, easily digested; no breakfast is allowed if the operation is in the morning, except a cup of bouillon or coffee taken about six hours before the operation. If, however, the operation is to be in the afternoon, a light breakfast of coffee and toast is the rule.

The hair, if long, should be neatly braided and covered with a muslin cap; and the clothing should consist of undervest, drawers, nightgown, wrapper, stockings, and slippers. The wrapper and slippers are to be removed and the bladder emptied just before the anesthetic is administered, also any false teeth or plate in the mouth must be removed.

Have a little whiskey in readiness in case of collapse, when it might be necessary to give a stimulating enema, and aromatic spirits of ammonia or smelling salts which will be of service in controlling the nausea.

Preparation of skin for operation. As to the preparation of the surface of the body, where the operation will occur — there are many different methods used; and the surgeon in charge will give directions to be carefully followed. The most common procedure is to wipe the skin dry, paint with tincture of iodine, and cover with sterilized gauze six hours before the operation. The iodine penetrates the skin and disinfects it better than a wet dressing: special point to be remembered is, do not put the iodine on very thickly, because when the skin is immediately covered with a compress, there will be danger of a blister.

Care of the patient after the operation. When your patient has been carried back to bed, he must lie between blankets until the natural warmth of the body is restored.

A word in regard to hot water bottles. So many serious burns have been caused by leaving hot water bottles in the bed with unconscious ether patients, that the rule is to remove the hot water bags or bottles until the patient is completely out of ether. If they must be left in the bed, put them in flannel bags, and be careful that a fold of the flannel blanket is between the patient and the hot water bag; furthermore, watch closely — move them from place to place, and see that the patient's skin does not get in the least red.

The easiest way to carry the patient from the operating table to the bed, is to use a long ironing board, covered with a blanket — it takes the place of a stretcher in a private house, and prevents any unnecessary strain on the patient. Two folded sheets, placed cross-wise under the patient, are of great service in helping to lift him gently on the bed from the improvised stretcher.

It is absolutely necessary to have some one remain beside the patient until he is perfectly conscious, especially if the nature of the operation is such, that any sudden movement might cause a hemorrhage. Keep the head low to prevent nausea, and watch the pulse and respiration carefully. If the nausea be very great an ice-compress on the throat often relieves it, but it will gradually pass off. One of the ways to keep an ether patient quiet is to make him as comfortable as possible. Rub the back with alcohol, place small pillows behind the back and between or under the knees. Cold compress on the head will relieve headache.

When vomiting begins, turn the head on one side, and wash out the mouth frequently, it will relieve the intense thirst and take away the odor and the taste from the vomiting; ask the surgeon when you may commence giving tiny pieces of ice or teaspoonfuls of very hot water. The surgeon will also give special instruction in regard to medication and diet to suit the case, and his orders

ought to be written down and not trusted to the memory.

Hemorrhage. One of the most important complications to watch for immediately after an operation is hemorrhage; some of the symptoms of hemorrhage are: great pallor of the face, weak and sighing respiration, faintness, a weak, rapid, irregular pulse, and, frequently, blood on the dressings. The outside dressing of the wound should be looked at very frequently to notice if there is any appearance of blood, and if it increases. If a hemorrhage should occur during the surgeon's absence, you must do all in your power to check it while awaiting his arrival. Do not allow your patient to get worried or excited; and remain as quiet as possible yourself. Elevate the wounded part. If it is the arm, hold it above the head; if the leg, support it with pillows. When the wound is in the trunk, elevate the foot of the bed and keep the head very low. Do not give alcohol or stimulants of any kind, as they only increase the hemorrhage by making the blood flow more rapidly. Apply hot water bags to the feet and legs. If it is possible to reach an artery above the wound, firm pressure upon it will check the flow. Firm but gentle pressure over the wound with a pad of gauze bound on tightly will sometimes help to stop the hemorrhage. When the hemorrhage is internal small pieces of ice should be swallowed whole, and ice-cloths applied over the abdomen.

Get ready some sterilized salt solution, made by adding one teaspoonful of fine table salt to a pint of water and letting it boil for half an hour, as the surgeon may find it necessary on his arrival to infuse it into the veins.

Rules for nursing. The principal rule to be observed in caring for a surgical case is absolute cleanliness. Everything about the patient and bed must be kept immaculately clean, and you should never touch a wound, or even the dressings on a wound, without first scrubbing your hands with soap and water (especially the nails, as

they form a great hiding-place for germs), and then soaking the hands for two or three minutes in a 1:1000 bichloride solution. Many cases of blood poisoning have arisen from the neglect of this simple rule in regard to the surgical cleanliness of the hands. An open wound causes the patient to be particularly susceptible to infection, and for this reason it is also necessary to be careful whom you allow into the sick-room, and to examine carefully any package or papers of any kind that come by mail, for there is always a chance that they may have been sent from a house where there is a contagious disease.

If the surgeon has left the wound open for drainage, and there is a great deal of discharge, this will prove a heavy drain on the system, and therefore it will be necessary to keep up the patient's strength with extra attention to diet. Nourishing foods of all kinds will be needed, and a tonic will probably be prescribed by the doctor. It is of great importance to keep a special record, noting down any change in your patient during the surgeon's absence. Many complications are likely to arise after surgical operations, and even the smallest symptoms are most important; for when discovered early, and at once reported to the surgeon, he is able to treat them without delay. For the rest, the general rules for nursing outlined in a former chapter apply equally well in surgical work. A great deal of the ultimate success of an operation depends upon careful nursing and cheerful surroundings; and the happier, brighter, and more comfortable you make your patient, the quicker and more complete will be his recovery.

SUMMARY

How to prepare for a surgical operation.

In sudden emergency, necessary to know how to get ready. Operation in morning, everything on hand night before.

Surgeon's list of requirements.
Not necessary to enter into preparation for major operations.
Necessary appliances for operation, see page 129.

Preparation of room.

First consideration, light.
Room adjoining bedroom best for operation.
Carpet removed if major operation.
Floor washed — soap, water, 1:120 carbolic.
If minor operation, sweep, dust, cover carpet.
Place kitchen table, cover with blanket, rubber and sheet.
One small pillow, sheet and blanket on top.
Two small tables, covered with towels and oilcloth.
Chairs, two basins, washed, disinfected for sponges.
One basin for sterilized towels.
Two slop jars.
All utensils scoured with bon-ami, washed and rinsed.
Window curtains tied back or removed.
Small screw for fountain syringe, near window.
Table or bureau for surgical dressings.
Surgeon brings instruments, dressings, anesthetic.
How to make an ether cone if necessary.
Temperature of room, 70° F., well aired.

Sterilized water and towels.

Use wash boiler, scrubbed inside and out.
Two boilers full required.
Boil water for half an hour, sterilized towel over top.
Solutions made from sterilized water.
How to make solutions of bichloride of mercury and of carbolic acid.
Vaseline to rub around nose and mouth of patient.
New nail brush, disinfectants, green soap for surgeon.
Surgeon brings rubber gloves.
Nail brush and orange stick sterilized.

If oxygen is ordered, have can in working order.
To prevent infection, absolute cleanliness.

Surgical bed.

Iron bedstead best, not absolutely needed in minor operations.
How to make surgical bed (see page 133).
About hot water bags.
Removed from bed until patient is conscious.
Great care required not to burn patient.
No pillow necessary, head low, to control nausea.
Towels on hand, and small basin.

The patient.

Ready when surgeon arrives.
Day previous, hot bath, including hair.
Surgeon orders cathartic.
No breakfast if operation in morning.
Coffee and toast if operation is in afternoon.
Hair braided, muslin cap.
Clothing required, see page 135.
Wrappers and slippers removed, bladder emptied before anesthetic is given.
Remove false teeth from mouth.
Whiskey on hand for emergency.
Spirits of ammonia or smelling salts.

Preparation of skin for operation.

Surgeon will give directions.
The most common method, iodine, and sterilized dressing.
Iodine good disinfectant.
Care in applying, not too thick; danger of blister.

Care of patient after operation.

Lie between blankets until natural warmth returns.
Serious burns have occurred from hot water bottles.

Cover bottles with flannel bags, and fold of blanket.
Watch that patient's skin does not get red.

How to carry patient.

Ironing board, covered with blanket.
Two sheets cross-wise under patient.
Necessary for some one to remain to guard patient until conscious.
Sudden movement may cause hemorrhage.
Head low, watch pulse and respiration.
If nausea is great, ice-compress on throat good.
Make patient comfortable.
Rub back, arrange pillows, cold to head.
When vomiting, turn head to one side.
Wash out mouth, relieves thirst.
Get directions about drink and food.
Write down doctor's orders.

Hemorrhage.

Complications to be watched for.
Symptoms (page 136).
Watch dressings for blood.

How to act until doctor arrives.

Keep patient from worrying.
Elevate wound; do not give stimulants.
Firm pressure on artery or over wound.
If internal, small pieces of ice swallowed.
Ice cloths over abdomen.
Have sterilized salt solution ready.

Rules for nursing.

Principal rule, absolute cleanliness.
Never touch dressing without disinfecting hands.
Open wound very susceptible to infection.
Care about visitors.

Extra diet if wound is drained.
Special record of case important.
Small symptoms often show complications.
Success requires careful nursing, cheerful surroundings.

CHAPTER X

FIRST AID IN EMERGENCIES

Preparedness. It is necessary to be prepared in some measure for the many unforeseen emergencies which are likely to arise in the home life. In case of an accident, it is the greatest relief to know how to be of assistance to the sufferer. So a few home remedies, within the reach of every one, and which may be easily administered, will be of service.

It goes without saying, that in every accident the first thing to do is to send for a physician; but frequently immediate assistance has to be rendered the patient while awaiting the arrival of the doctor.

Burns and Scalds. There are three classes of burns, and they ought to be treated according to the class to which they belong.

Burns of the first degree. When the skin is not broken, it is called a burn of the first degree, and is best treated by covering thickly with bicarbonate of soda, or a layer of cotton wool to exclude the air, and a bandage put on very gently.

Burns of the second degree. Burns of the second degree are so called when the outer skin is destroyed. In these cases dry powder is not so useful, as it will adhere to the injured part and become very difficult to remove. When the skin is broken it should be treated as a surgical wound, kept perfectly clean, and if possible, washed off with salt solution or sterilized water. The burn can then be dressed with gauze dipped in a solution of bicarbonate of soda or carron oil; if there is nothing else on hand,

pure vaseline may be used. Spread the dressing on a piece of old but surgically clean, linen; apply it to the burn, cover with cotton wool and a loose bandage. Some authorities advise washing the burn first with a solution of bicarbonate of soda and water, as they claim that it relieves the intense pain. When changing the dressing on a burn, have the fresh dressing all ready to apply before removing the old one, so that no air will touch the burn. The more carefully you keep it covered, the less will be the pain. When a blister has formed it must not be opened before the burn is dressed.

Burns of the third degree. A burn of the third degree is so called when the tissues are completely destroyed, and it is wisest to apply only a temporary dressing while awaiting the doctor's arrival. Even a burn that does not extend very deeply under the surface may be dangerous. When it covers a large surface of the body it is often followed by shock or collapse. If it be at all extensive, a physician should be summoned, as serious complications frequently follow, especially if steam or smoke has been inhaled; and pneumonia, bronchitis, or inflammation of the intestines are not uncommon results.

Should the clothing catch fire, roll the person over and over on the floor, and cover him with rugs, blankets, or any woolen covering. If there are symptoms of shock accompanying the burn, treatment for that must be carried out immediately,— before attending to the wound,— as it often proves fatal, especially with children.

Shock. Symptoms. Shock and collapse are the result of a severe injury to the system, caused by accident, serious operation, extreme fear, or sometimes from weakness during the course of a severe disease. The symptoms are: quick, weak pulse; respiration slow and shallow; surface of the body very cold, especially the extremities, and the temperature below normal.

Shock. Treatment. Lay the patient down flat, with-

out raising the head, elevate the foot of the bed, put on plenty of blankets, and rub the body all over with hot alcohol or whiskey. Apply hot water bags, bottles, or hot bricks to the feet and about the legs, and a light hot water bag over the heart and plenty of fresh air. Avoid all noise or excitement, and give a spoonful of hot coffee or hot water every ten or fifteen minutes.

There is one important rule to be remembered in the treatment of shock, that is, if the shock has been caused by some injury to the head, as, for instance, a blow or fall, never give alcoholic stimulants of any kind whatsoever, but use instead strong hot coffee, tea, or hot milk.

In all cases of shock a physician should be called immediately.

Frost-bite. Cold, not heat, must be applied in all cases of frost-bite. One of the best remedies is rubbing the frozen surface with a handful of snow or a piece of ice; and then with a coarse towel until the whiteness disappears and the blood flows freely. On no account allow the patient to go near a fire or into a hot room, until circulation is entirely restored.

Fainting. This can be quickly overcome by laying the patient flat on the ground, with the feet higher than the head; ammonia or smelling salts held in front of, but not too near, the nostrils; loosening the clothing about the throat, opening the windows, and sprinkling a little cold water on the face. Alcoholic stimulants are as a rule unnecessary; spirits of camphor on a lump of sugar or a spoonful of aromatic spirits of ammonia in water, will prove valuable heart stimulants.

Nervous hysteria. In cases of nervous prostration, or with very nervous excitable people, overtired or worried, you may meet with an attack of nervous hysteria. It needs to be treated in a firm but gentle manner. A teaspoonful of aromatic spirits of ammonia in a little water, or a small dose of bromide solution or paregoric, which-

ever you have on hand, will help to quiet the nerves. Open the windows wide, even in winter, and when there is an oppression on the chest after violent crying, a small mustard leaf or plaster applied for a few moments has a wonderfully soothing effect.

Poisoning. Accidental poisoning, which may be caused in various ways, needs generally the most immediate attention to save life. These accidents are often caused by pure carelessness in the giving or taking of medicine in the dark or without looking carefully at the label, or by leaving dangerous drugs within the reach of children.

Immediate treatment. When any one is poisoned, and you are not sure of the antidote, do not hesitate a moment, but give an emetic of some kind while awaiting the arrival of the doctor. Mustard and salt will be found in every household, and are very effective. For an adult give a teaspoonful of mustard or salt to every glass of lukewarm water. Make the patient drink two or three glasses, no matter how he objects, and then by tickling the throat with the finger, the irritation will cause vomiting. Repeat in ten minutes so that the stomach will be thoroughly emptied. In case of children give ipecac instead of mustard and water. When there is any delay in getting the mustard or salt, use plain, lukewarm water in large quantities. After the stomach is thoroughly emptied, give an enema if the doctor has not arrived. When the poisoning is caused by canned goods or stale fish, give a large dose of castor oil as soon as the vomiting ceases. There are various antidotes to be used according to the poison that has been taken, and it is well to have a list of them on hand.

Antidotes for poisons. For *Acid Poisons,* such as Carbolic Acid, Nitric Acid, Oxalic Acid, give two or three glasses of milk and lime-water; no oil of any kind, as it would only help to dissolve the acid. Do not give emetics,

as the acid would a second time tear the tissue of the throat, during vomiting.

For *Irritant Poisons,* such as Tartar Emetic, Arsenic, Paris Green, Rough on Rats, Iodine, Iron, Lead, Mercury: First give an emetic; then give plenty of milk, white of egg, or flour and water.

For *Alkaline Poisons,* such as Ammonia, Lime, Saltpeter: After an emetic, give lemon juice or vinegar, followed by castor oil.

For *Narcotic Poisons* the treatment is as follows:

Aconite: Emetic, then stimulants and hot applications.

Belladonna: Emetics, artificial respiration, heat, hot mustard baths.

Alcohol: Emetics, cold to the head, and heat to the feet.

Digitalis: Emetics and a dose of strychnin, keep the patient quiet.

Opium: Emetics, strong black coffee by mouth and rectum, and active exercise. Patient must be kept awake.

In all poison cases give plenty of hot water to drink, as it flushes out the system (as much as three quarts is sometimes used), and keep up the treatment without intermission, no matter what objection the patient may make.

Care is needed for the first few days after poison has been in the system, especially in regard to diet, which should be very simple.

Poison from ivy. In case of poison ivy, wet dressings of bicarbonate of soda well wrapped around the inflamed surface is the best treatment.

Poison from stings of insects. Ammonia and water, salt and water, or bicarbonate of soda; any one of these remedies will remove the pain and swelling.

Sprains. Very hot or very cold water is the best treatment for a sprain. Hold the limb under running water

as hot as can be borne for about half an hour, or keep it covered in hot water, renewing the water as it cools. Then apply a moist dressing of alcohol and water or arnica, and bandage firmly, beginning at the extremity and working upward to a good distance above the sprain. Moisten the dressing every two hours, and the inflammation will subside. Repeat the bathing in hot or cold water morning and evening, and give the limb perfect rest. Of course, if within reach of a surgeon, send for one, as what may at first appear a simple sprain may really lead to serious trouble, and many surgeons nowadays treat a sprain by putting the limb into plaster of Paris, or bandaging with strips of adhesive plaster.

Bruises or cuts. Hot sterilized water is the safest and easiest remedy to apply to a bruise or a cut, as it fulfills all the need of surgical cleanliness and at the same time reduces inflammation. Bathe the wound with a piece of old linen which has been boiled. If the wound is an open one, keep it under water until perfectly clean, and wash out all foreign bodies carefully. If the bleeding is troublesome hold the injured member up in the air (above the head, if possible) for a few moments, at the same time applying a little pad of linen pressed firmly on the wound. Dress it with sterilized linen or gauze, and change the dressing daily. When the skin is not broken allow the injured part to remain in hot water as long as possible. The water will be very soothing, and will help in subduing the inflammation. Styptic cotton, which is made up in small boxes, is very useful in dressing a cut or bruise, and will immediately stop the bleeding. It is antiseptic and heals a wound very quickly. Every household should have something of this kind on hand.

Never touch a cut or open wound without well scrubbing your hands and nails, and dipping them into an antiseptic solution. If you have no dry sterilized dressing

on hand, in an emergency, dip a piece of clean cheese-cloth or fine cambric into sterilized water and iron with a very hot iron until dry.

Hemorrhage from the lungs. Although hemorrhage from the lungs appears very alarming, still it is not, as a rule, a sign of immediate danger, and can be controlled with a few remedies. Give plenty of cracked ice. Put an ice-bag on the chest, or, if you have no bag on hand, wrap some ice in a piece of rubber sheeting. Prop up the patient in bed and keep him absolutely quiet.

Hemorrhage from the nose. This can generally be stopped by putting the patient flat on the back, with hands held up over the head; then compress the nostrils. Ice should be applied to the back of the neck, bridge of the nose, and to the wrists, and the tongue should be pressed firmly against the roof of the mouth, with a pad of paper between to increase the pressure.

Should the bleeding point prove very obstinate, plug the nostrils with a bit of absorbent cotton or small pieces of linen with a string tied to them, for a few hours.

Frequent hemorrhages sometimes come from great activity of the brain, but more often from ulcers or growths of some kind which should be attended to.

Hemorrhage of legs or arms. Elevate the limb as high as possible, and if necessary apply a tourniquet, made with a handkerchief or bandage. In the center of the knot tied in the bandage over the artery, place a small stone or other hard substance, or tie a hard knot in the middle of the bandage, then tie the bandage tightly and twist with a stick until the bleeding stops. This tourniquet must not be kept on longer than one hour.

Foreign body in eye. When a foreign body gets into the eye, do not rub it in, but pull the upper lid down over the lower two or three times, and the irritating little atom may be left on the cheek. If not, turn back the upper lid

over a darning needle and brush off the atom with a corner of soft linen or absorbent cotton.

Inflammation of the eyes. When the eyes are sore or overtired, bathe them night and morning with a solution of boracic acid (one teaspoonful of the acid to a pint of boiling water) or salt solution; apply with a small piece of absorbent cotton. Salt solution is also of use in strengthening the eyes.

Sore eyes of any kind are very contagious, so that any piece of cotton or gauze used in washing them must be immediately burned. When the eyes are inflamed from cold or any other cause, cut some pieces of linen, about two inches square, lay them on ice in a dish, and then place them over the eyes, changing them every three minutes, so that they will not have time to become warm. You will find that this treatment gives great relief, and it reduces the inflammation quicker than anything else. Should lime accidentally get into the eyes, wash them immediately with equal parts of vinegar and water, until all the particles are removed. Then bathe them well in warm water, and keep the patient in a dark room for a few hours.

Foreign body in ear. If a foreign body, such as an insect, should get into the ear, a few drops of hot sweet oil will float it to the surface, whence it can be easily removed.

Earache. Heat of some kind is the most direct cure for earache. Hot water bags, especially the small, thin, black rubber ones, are very useful, but should be frequently refilled.

Salt heated in the oven and put in a flannel bag retains the heat a long time, or a piece of hot flannel tied firmly over the ear is very soothing.

Cotton saturated with equal parts of laudanum and glycerine often gives the greatest relief. Should these

simple remedies not avail to ease the pain, syringing the ear with boiled water at a temperature of 108° to 110° F., every two hours, will give the greatest comfort, and almost invariably stops the pain, but the syringing must be done most carefully and gently. A teaspoonful of boracic acid should be added to the boiled water, and a regular ear nozzle with a fountain syringe used, so as to have a continuous flow. Hold the ear downward and a little backward; let the water run very gently, not straight into the ear, but a little to one side. Great injury may be caused unless the syringing be done very carefully and slowly. A little of the hot water allowed to remain in the ear for a few moments is very soothing. Be careful not to expose the ear to any cold air after syringing with hot water. Earache is sometimes caused by an accumulation of wax in the ear, and in that case the hot water will cure it.

Never fill an ear with cotton wool when there is a running discharge.

Toothache. This can be much relieved by holding hot Pond's extract or hot water in the mouth until it becomes cool, and then taking a fresh mouthful, keeping it up as long as possible; you will be surprised at the comfort and relief it gives.

When there is a hollow in the tooth, put a couple of drops of pure carbolic acid, creosote, or oil of wintergreen on a piece of cotton wool, and push it firmly into the hole, taking care not to touch the gums. Consult a dentist without delay.

A tiny piece of mustard leaf applied to the gums, or iodine painted on, will help the pain when it comes from general face-ache. Hot water bags should not be used in toothache, for fear of forming an abscess.

Foreign body in the nose. When a child gets something up his nose, you may dislodge it by making him sneeze with pepper or snuff.

Foreign bodies in the throat. It sometimes happens that a fish bone gets stuck in the throat, and it is impossible to reach it with the finger. In that case a raw egg swallowed quickly will generally carry it into the stomach. If a pin, a piece of glass, or any foreign body with a sharp edge is swallowed by mistake, do not give an emetic, but make your patient eat solid food, as potatoes or bread, so that the object may become embedded in the food and carried out of the system without injuring the intestines.

Hiccoughs. You can often stop hiccoughs by making the person sneeze half a dozen times, or letting him sip water and hold his breath as long as possible between each sip. Another method is to pour vinegar on a lump of sugar and swallow it whole.

Vomiting. Violent vomiting is often controlled by a Seidlitz powder divided into three parts, and one part taken every fifteen minutes, at the same time a mustard paste should be applied over the pit of the stomach. A spoonful of boiling water every ten minutes is of service in settling the stomach.

Hydrophobia. Should a child be bitten by a dog, and there is any fear of the dog being mad, and you are out of reach of a doctor, bind the limb tightly between the wound and the heart, to prevent the poison being absorbed into the system. The bandage should not remain on for more than half an hour for fear of stopping the circulation.

The wound should also be cauterized with pure carbolic acid, nitrate of silver, or a knitting-needle heated to a white heat.

Epilepsy. This trouble is unfortunately only too common, and it is well to know how to act should a fit occur in your presence. It may come on at any time, and is generally, but not always, preceded by a peculiar cry; the patient falls to the ground unconscious, and the body is

rigid for a few seconds, and then begins to twist and jerk.

Treatment. Loosen the clothing about the neck, put something between the teeth to prevent the patient from biting his tongue, and do not try to restrain his movements; give him plenty of fresh air, and he will come to in a few moments and fall into a heavy sleep.

Apoplexy. One of the small blood vessels breaking causes pressure on the brain.

The symptoms are, unconsciousness, flushed face, slow, loud breathing. Loosen the clothing about the neck, elevate the head and chest, ice cloths on the head and heat to the feet. Be careful never to give stimulants.

Asphyxiation. Accidents sometimes arise from suffocation caused by gas, smoke, sulphur, etc. When such an accident occurs, remove the sufferer at once into the fresh air, loosen all clothing about the neck and chest; throw cold water on the face and chest. If necessary, artificial respiration must be resorted to until natural breathing is restored.

Artificial respiration. The knowledge of how to keep up artificial respiration after an accident has happened from narcotic poisoning, suffocation, or drowning is of great importance and has saved many lives. Place the patient on his back with the shoulders slightly raised; pull out the tongue and hold it with a handkerchief around it tied under the chin. Then, kneeling at the head, grasp the forearm between elbow and wrist and draw the arms up gently and slowly over the head until the hands touch behind the head. Keep them there for two seconds, so as to allow some air to enter the lungs, then carry them slowly back and press them against the sides of the chest to expel the air. After a couple of seconds repeat the movements, and keep them going at the rate of sixteen to the minute until there is some sign of life. It has sometimes been found necessary to work thus for a long time

before breathing is reëstablished. Cases on record show recovery after two hours of artificial respiration.

Schaefer's method of artificial respiration is the best. This has been described as follows: "The patient is placed on the ground, with his face downward, and with a thick folded garment or pillow under the lower part of the chest. Care must be taken that the entrance to the mouth and nose is clear. The operator places himself in a kneeling posture astride of the patient, facing the patient's head, his knees being opposite the patient's hips. He then places his hands flat over the back of the lower ribs, one hand on each side, and gradually throws the weight of his body forward, so as to make firm pressure on the lower ribs. By this means the chest is compressed and air is forced out of the lungs. The operator then brings his own body up into the semi-erect position, but still retaining his hands in position, thereby relaxing the pressure on the ribs, and enabling air to be drawn into the lungs by the elastic reaction of the chest wall. The process is repeated regularly about 15 times a minute, and should be continued for at least half an hour."

Sunstroke and heat prostration. Ice cloths to the head, or cold baths with constant rubbing is the best treatment; keep the patient quiet, and watch the pulse as heart failure may result.

Fractures. There are different kinds of fractures, simple, compound, comminuted, etc.

The best first aid treatment when a leg or arm is broken, until the arrival of a doctor, is to keep the limb quiet, by binding on both sides, a splint made from walking sticks, umbrellas, pieces of board, strong cardboard, etc., then apply ice cold compresses to reduce the swelling.

The greatest care must be used in handling the patient, for if the fracture is a compound one the wound in the flesh may be greatly increased; and a simple fracture may be made compound by any careless movement.

CHAPTER XI

DIETETICS — DAINTY DISHES AND HOW TO SERVE THEM

Food. Its importance in sickness. How to select and prepare the proper kind of food; when to give it; and in what proportions. These are most important points in the education of a Home Nurse. Diet in the treatment of all diseases is of primary importance now-a-days. Feeding the sick is described by a medical authority, as, "a science and an art"; for one must consider the great laws of supply and demand, and how to apply them to the individual patients.

"Calorie," is a term with which we are fast becoming familiar. **"Heat units,"** describes the term in a way to be better understood by the laity. Every human body requires fuel, in the form of "heat units" to keep it in normal condition and when invaded by disease, especial care has to be observed that a proper proportion of "heat units" is taken into the system daily, to counteract the lowered vitality caused by disease.

There is a great difference in the requirement of food for a human body at rest, or one employed in active work, also in the requirements of an adult in distinction to a child.

Should the Home Nurse face the problem of caring for a chronic invalid, or a patient whose constitution has been weakened from a severe illness, it would be well for her to keep on hand a good book on "Food values," and "Dietetics" (found in almost every Public Library) so that she may supply the right number of "Calories" or

"heat units" required to build up the constitution of her patient.

Functions of Food. Food has three important functions to perform inside the human body, namely: Giving heat, forming tissues, repairing waste.

During illness, when the appetite for food has to be stimulated the utmost daintiness should be observed in the preparation and serving of meals.

Those of my readers who have passed through an illness will readily understand what a difference it makes at mealtime if the food is well cooked and daintily served, inviting enough to create an appetite, even where there is little desire to eat.

Suggestions about patients' food. One of the first suggestions I should like to make is, never ask your patient beforehand what he or she would fancy in the way of food; for, even in health, if you are always aware what is to be placed before you, the chances are that you will go to the table without the ghost of an appetite. This is especially so in sickness, and sometimes when there is not the slightest desire to eat, a little delicacy nicely cooked, daintily served, and kept a profound secret until uncovered at the bedside will be received with favor and enjoyed thoroughly.

Preparing the food. The preparation of extra dishes ought not to be left in the hands of an ordinary cook, unless you are blessed with an exceptionally good one. As a rule, they are too busy or indifferent, to take any extra trouble to have everything piping hot and done to a turn. It does not take more than a few moments to broil a steak, bird, or chop, and if you superintend the cooking, you will always be sure that it is carefully done. I know of nothing more annoying than, after ordering some especial dainty for an invalid, to have it completely spoiled by careless cooking.

Leave directions with the cook to have everything in

readiness for you, and then slip down to the kitchen ten or fifteen minutes before the meal-time, and either broil the meat or bird yourself or superintend its cooking. Broiling should be done over a very quick fire to retain the juice in the meat. Allow it to be a rich brown on the outside, and still remain slightly red and juicy in the middle. All hot meats must be served at once on hot plates straight from the fire to the bedside, without being kept standing round on the stove or in the oven getting hard and dry. Always cover dishes containing hot food while carrying them through passages and upstairs. Hot water plates arranged with a compartment under the plate to be filled with boiling water, thus keeping the food hot all through the meal, are very useful in cases of long illness.

The tray. To make a tray look attractive is almost as important as having the food properly cooked. Cover it with a snowy napkin or tray-cloth (if possible you should use a fresh one for every meal). Choose the prettiest and daintiest china and glass in the house. Do not cling to the idea that it is necessary to use thick, cheap china in the sick-room for fear of breakage, for this can be avoided by careful handling, especially when washing the dishes, and your invalid will appreciate her meals twice as much when allowed to use the best of china. The cup to be used for tea, coffee, or bouillon, is first filled with very hot water so that it shall be thoroughly heated. Tea or coffee should be put in a little tea-pot or covered pitcher, and not poured into the cup, as it is sure to spill over into the saucer, and become cold before it reaches the bedside. Besides, it is of great interest to some people to pour out their own tea or coffee, adding just the amount of sugar and cream they desire. Cut sugar is needed in a dainty glass or silver bowl, and cream or hot milk in a small pitcher. A glass of ice water must never be forgotten on the tray, as well as pepper and salt, as tastes differ in

regard to seasoning, and for this reason, when preparing the food, do not put in all the pepper and salt that you think necessary, but leave room for the patient to add a little or not as she desires. Plates for hot meat must be very warm. Hot rolls or biscuits are placed between the folds of a table napkin.

One of the most important rules is not to crowd a tray with dishes and food, but to give very small portions of everything. Large, untidy pieces of meat swimming in greasy gravy will take away any invalid's appetite. Toast cut in "ladies' fingers" and also baked potatoes look very inviting peeping from the folds of a snowy napkin. Toast should be made from bread not fresh, cut about half an inch thick, the crusts removed, and toasted on a fork or broiler over a very hot fire, crisp and yet not burned, soft and yet not soggy, and served immediately. Graham or wheaten bread, rusks or zwiebach, make a pleasant change from the ordinary white bread.

Jellies look best in glass dishes, and when serving an egg fill the egg-glass with hot water and roll the egg in a doily; do not open it before reaching the bedside.

A tiny sprig of parsley or water-cress used to garnish the meat dish, and a fresh-cut flower beside the table napkin, will help to make the tray very attractive.

Preparing fruit. Fruit should be placed on ice for a little while before meals to make it cold. Grapes need to be washed and put in a glass dish on small pieces of ice. If you wish to make the grapes especially dainty, remove the skins and the seeds. Oranges are sliced with sugar after being carefully peeled, or they are cut in half like grape-fruit, all hard fibers removed from the center, the skin loosened around the edges, and served with powdered sugar. When preparing peaches, do not cut them until just before serving and then use a silver or plated knife. A steel knife will leave a taste on the peaches, and if they are prepared even half an hour before the

meal, they will become dark in color and will not be half so attractive.

The following is a nice little dessert for a hot day in summer, and is easily prepared: slice an orange, lemon, apple, and peach, in a saucer; add a few cherries and a little pineapple, and serve with cream and sugar; or, if you have some wine-jelly on hand, put it on the fire for a moment, then add to it the cut-up fruit, turn all together into a jelly-mold, and place it on the ice to cool. It will make a delicious dessert.

The more attractive you can make your tray look, and the more variety you arrange in the way of food, the greater will be your patient's pleasure and enjoyment in the meal; and you will find it takes very little more care and trouble to arrange a tray daintily, than to put it before the invalid in an untidy and slovenly manner.

Serving the meal. Before serving a meal, open the window for a moment to freshen the air. Wipe the patient's hands and face with a damp towel, and she will be ready to appreciate her food. After carrying the tray upstairs, place it on a table near the bed. If your patient is allowed to sit up, support her back with a bed-rest and pillows, and throw a shawl over her shoulders. A bed-tray or bed-table is very useful, and almost a necessity in long cases of illness, as it takes all the weight off the patient. Should there be none at hand, you can improvise one by placing two or three books on each side of the bed and laying a tray or cutting board across them, making the books on each side high enough to prevent the tray resting on the knees. Cover the tray or board with a table napkin, and, even if the meal is a very simple one, serve it in courses, one dish at a time. With fastidious people, it frequently takes away any appetite they may have if all the food is put before them at the same time. In cutting up the meat and opening the egg, try and do so in the daintiest manner possible.

Cut up the bird or meat on a side-table, open the potato and season it, butter the toast, and when necessary pour out the tea and coffee; then, unless you have something jolly or interesting to talk about, take up a book and read some bright little extract, or leave the patient alone to enjoy her meal. Do not sit down in silence and watch every mouthful she takes, thus causing her to hurry and taking away the enjoyment of the meal. It frequently happens that listening to some interesting story will divert your patient's attention from herself — and she will be likely to eat twice as much as if allowed to stop and consider every mouthful. Sick people have to be humored a little in their fancies, and anything likely to give them a distaste for food is to be carefully avoided.

As soon as the meal is ended, take all the empty dishes out of the room immediately, remove the extra pillows, brush out any crumbs that may have found their way under the bedclothes, and allow your patient to lie down quietly while you go to your own meal and the chances are that on your return you will find her sleeping comfortably.

Time for serving meals. It is a good plan to serve the invalid's meals half an hour before those of the rest of the family, so that she can be properly cared for, and the food will be hot and comfortable.

Coaxing the appetite. When the appetite is very poor, give only one dish at each meal, instead of two or three, and solid food will be more appreciated as a rule, and is more nourishing than sweets in any form. A tiny quail or squab, daintily cooked and served on a slice of crisp toast, a small finger of broiled steak, a chop, a tiny piece of the breast of chicken or sweetbread with cream sauce — any of these dainties, prepared without the knowledge of the patient, will not fail to tempt the appetite. Small pieces of crisp celery, served in a glass dish on pieces of ice, are a great addition to a meal, and celery is

easily digested and considered very soothing to the nerves. Or a few tender leaves from the heart of the lettuce, crisp and cold, may be served with French dressing. When tomatoes are served, plunge them for a second into very hot water, and the skin will peel off easily; then lay them on the ice for an hour before the meal, so that they will be firm and cold before serving. Cut them in thin slices and serve with any dressing required.

Feeding helpless patients. When feeding helpless patients, it should be done with great care and delicacy. Do not have the glass or cup more than half full, or it will surely spill down the neck. Raise the head gently, but not too much forward, or you will prevent your patient swallowing easily. Do not give the food too fast. A small cup with a wide top will be found the easiest kind from which to drink when the head is low.

If your patient is only allowed one or two tablespoonfuls at a time, do not tantalize her by filling the glass half full and telling her to take a few sips. Just put in the exact amount to be given, and allow her to drain every drop. When children are only allowed a certain quantity at one time they will be much more contented if you fill a small glass full, instead of giving them a small quantity in a larger glass.

If a feeding-cup is used, a glass one is the best, as you can see just how quickly the fluid is flowing, and you will not be likely to choke your patient by giving it too rapidly. But a glass tube is better than a feeding-cup and is more easily managed. If it is not bent at the right angle, hold it over the flame of an alcohol lamp for a second, and you can then bend it any shape you desire. With some patients it is better to give them their nourishment at short intervals and in small quantities; and again, others need to wait three or four hours between meals to allow the stomach to empty itself thoroughly before being filled again. It depends so much upon the

nature of the disease, and the condition of the patient, that no regular law can be laid down in regard to how often nourishment should be given. When there is a great drain on the system in the way of a discharge from an open wound, or a generally run-down condition; or after a high fever has exhausted the vitality, a great deal of extra nourishment is necessary to keep up the strength, and you must induce your patient to eat and drink as much as possible. During convalescence something like the following may be used:

Bill of fare for one day. Breakfast, about 8 A. M., consisting of a little fruit (raw or cooked); one of the many cereals nicely prepared; an egg in some form, or a small piece of broiled fish or bacon; tea or coffee and toast. Hot cakes or biscuits are not easily digested when one is confined to bed.

About 11 A. M., if tired after the daily bath, a cup of bouillon, eggnog, or milk punch will be refreshing.

At 1 P. M. the heartiest meal of the day should be taken. Oysters, with the hard part cut out, or soup to begin with, then some meat, either rare broiled steak, chop, quail, squab, chicken, or sweetbread, with one vegetable such as baked potato, string beans, spinach, or stewed celery. A simple dessert, if desired, as custard, milk pudding, rennet, or ice-cream.

In the middle of the afternoon a little fruit, cup of cocoa or chocolate, or thin bread and butter and tea, is acceptable and helps to break the monotony of the day, and at six o'clock a simple supper of egg in some form, scraped beef sandwich, or creamed chicken; with milk-toast and a baked apple or preserved fruit should be served.

Nourishment at night. When nourishment is necessary during the night or in the early morning hours, as it often is when the patient is recovering from a severe illness, broth, hot milk, bouillon, or cocoa is best. Should your patient be on a milk diet, she ought to take at least

four ounces of milk every two hours, and, if possible six ounces.

The juice of fresh fruit is at all times better than the pulp, and is more easily digested.

Hints about feeding. In all cases of illness food plays an important part and should be given careful attention. It either helps or hinders a rapid recovery.

The appetite of a sick person has to be coaxed and encouraged, as a rule, and you will generally find that many things they care for in health become very distasteful when confined to bed, so that the more change and variety you can devise in the bill of fare, the more likely your invalid will be to take the desired amount of nourishment. Arrange every morning what you decide to give for the next twenty-four hours, and then see that all necessary supplies are on hand. If it should be the housekeeper of the family who is ill, try and make all arrangements without referring to her, and you will find that she will enjoy whatever you set before her, particularly if you contrive some new dish, that she has not tasted before.

Diet of children. Children when sick, require the very simplest food. It is difficult to get them to take more than a few mouthfuls when they do not feel hungry, so they ought to have the most nourishing food in small quantities about every two hours, and if you can call it by odd names and turn the meal into play, they will often forget themselves and be coaxed into taking a sufficient quantity.

Foods that are easily digested by adults do not always agree with children, and growing children require more food than adults. Of course eating at any time that one is hungry, as many children are allowed to do, is very wrong. Regular hours are necessary, make four or five meals, at stated times, for food, and keep to your schedule. For sick children between two and thirteen years the fol-

lowing list is a good one to draw from: Milk, beef-juice, broths, chicken, lamb, milk puddings, jellies, eggs, fruit, cereals, bread and butter, cocoa, and fruit juice.

Children when ill sometimes object to taking milk. One mother was bright enough to add a few drops of vanilla essence and a little sugar to the glass of milk, and called it "liquid ice-cream," and her little boy drank it with great delight, although he would not touch a glass of plain milk. Sometimes the addition of a little hot water and sugar, and one teaspoonful of tea, will insure the milk being received with favor by the little one under the name of "cambric tea." The white of an egg well beaten and mixed with an equal part of water and a few drops of vanilla essence or lemon juice is very nourishing and stimulating.

Diet in disease and convalescence. In all cases of illness, when a physician is in attendance, no food of any kind should be given without his permission, as sometimes great harm may be done by giving what appears to be a very simple food, but which in reality is most harmful to the patient.

There are some diseases in which it is necessary to be especially strict in the diet, as, for instance, typhoid fever, Bright's disease, gout, and many others.

In the following pages I have given a few suggestions that may be of service regarding nourishment in some of the ordinary cases of illness, but as complications are likely to arise in any disease, the physician should always be consulted.

When convalescence is reached after any disease, as a rule the patient is put on "light diet," the various forms of which are left to the discretion of the nurse, and these suggestions are to assist the Home Nurse in arranging some variety in the food, and to give her a general idea of the diet best suited to the disease.

Diet in fever cases. Physicians do not starve a fever

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Diet in fever cases. Physicians do not starve a fever

case in these days as they used to do half a century ago; scientific research has shown that plenty of nourishment is required to replace the waste of tissue caused by the fever, and also that large quantities of fluid are necessary to wash out the kidneys and to reduce the temperature.

An even diet should be maintained to supply about 3,000 calories or "heat units" in the system during the twenty-four hours. When the temperature is high, however, two points must be considered in choosing the proper food: First, the digestion of the patient is weakened by the disease; and second, the action of the stomach and bowels is greatly interfered with by the effect of the high temperature on the system.

During that period of the disease when the fever is high, nourishment is given in fluid form, such as milk in its various preparations — whichever agrees best with the patient; as milk and lime-water, milk and Vichy, peptonized milk, buttermilk, kumyss, somal, etc.; broths, light soups, beef-juice, and gruels. The amount and frequency of administration is regulated by the physician. When the fever declines light diet is usually prescribed, and for the first week at least the solid food should be given at noon, or even a little earlier in the day, while the temperature is low, as it is then more easily digested; and during the afternoon and evening, when the temperature is inclined to rise, nourishment should be given in liquid form.

For light diet, during the early days of convalescence, soups thickened with rice, barley, or arrowroot will be more satisfying to the patient than clear soups and broths. Farinaceous food, when nicely seasoned and carefully cooked, is often acceptable; so, too, are eggs in various forms, milk and cream toast, chicken and beef jelly, either hot or cold. Sweet fruits, rare beef and green vegetables are of particular importance to increase the red corpuscles in the blood, and prevent anemia.

The yolk of an egg well beaten with a little sugar, an ounce of brandy, and some cinnamon-water is pleasant to the taste and very nutritious.

Drinks between meals. Lemonade, not very sweet, when given between meals is easily digested; so, too, are flaxseed tea, barley-water flavored with lemon, milk whey, and the unfermented grape-juice now used extensively, which is delightful to the taste, slightly stimulating, and as a rule does not upset the stomach. Drinks of this kind should be given frequently, not in large quantities at one time, but a few spoonfuls at short intervals during the day, as in the latter case the thirst is relieved more effectually than when a large amount is given every three or four hours.

Convalescent diet. During convalescence, coffee and tea are generally allowed in small quantities when there are no nervous symptoms. In regard to alcohol in any form, that must be left entirely in the hands of the physician, as he will be the best judge of what is suited to the case, and stimulants of any kind should never be given without his permission.

When resuming solid food after a long period of fluid diet, it must be done very gradually, so as not to overtax the digestive organs. Meat when first given should be in very small quantities, either minced, chopped very finely, or scraped. Starchy foods are of great service in building up the system.

Special dishes during convalescence. During convalescence from fevers, as soon as the physician decides that solid food is desirable, some of the following dishes may be given under the form of light diet and subject to his approval, choosing the simpler ones for the first few days.

Chicken broth with arrowroot or rice; milk or cream toast; junket; scraped beef sandwiches, or scraped beef in balls; sago or rice pudding; bread and milk; a little

cooked fruit; especially baked apples; chicken and beef jelly; bouillon with an egg beaten up in it; poached or scrambled eggs; boiled or stewed sweetbreads; a little wine or calf's-foot jelly; custard or tapioca cream; occasionally a baked potato, very mealy and soft; cocoa made with equal parts of milk and water; chicken panada; cream of celery soup; and later on potato soup with croutons in it; lightly broiled lamb chops or a small piece of rare beefsteak; game, creamed potatoes; snow pudding or orange jelly.

Diet in typhoid fever. Typhoid fever requires a very much stricter form of diet than any other fever, as from the nature of the disease the intestines are particularly sensitive, and the physician's orders must be carefully adhered to.

A relapse has been known to occur in typhoid fever at the hospital, by the patient eating some food brought to him by an over-anxious relative, without the knowledge of doctor or nurse. As a rule, milk is the principal diet throughout the disease, although where milk does not agree well with the patient the physician sometimes finds it best to vary it by light broths or gruel, but the broths must be prepared most carefully, and be entirely free from grease or fat.

Milk, cream, eggs, sugar, bread and butter is the schedule for diet in typhoid fever carried out in one of our large hospitals. The physician in charge will make an outline of the diet best suited to the individual patient; and the home nurse must follow it absolutely.

Typhoid-fever patients are as a rule almost ravenous when they commence to convalesce, and the greatest care has to be taken that they do not overload the stomach or eat anything that may cause a relapse. A limited supply of solid food must be given even for some weeks after the temperature is perfectly normal.

Diet in pulmonary tuberculosis. In the treatment

of pulmonary tuberculosis, diet is very important, as the disease is generally of such long duration that plenty of nourishment is required to keep up the strength. At the same time great care is necessary in selecting the best food to suit each individual case, for dyspepsia and diarrhea are two of the most frequent complications to be fought against, especially in the advanced stages.

Milk, fats, and oils should form the principal diet; meat once a day is as a rule sufficient, and when taken should be rare and juicy. Scraped beef or beef-juice is to be preferred as the disease advances. The heartiest meal should be taken early in the day, as in the case of other fevers, the temperature generally rises toward evening, and that interferes with digestion. Rich cakes, sauces, fried meats, and pastry should never be given; but, instead, cereals of all kinds, plenty of fruit cooked or raw, abundance of milk in every form, eggs, game, jellies, cream, butter, and nourishing soups.

Warm milk taken slowly between meals is very beneficial; sometimes if it is diluted with a little hot water or Vichy, it agrees better with the patient; a pinch of salt added to the milk will also be of service in helping the digestion. Cream and hot water may also be recommended.

After drinking milk the mouth must be thoroughly rinsed with some simple mouth wash, otherwise a very unpleasant taste will remain, and this may give the patient a strong dislike to milk, even amounting to nausea.

A large amount of food is required, as the disease rapidly wastes away the tissue, and when there is little or no appetite extra nourishment has occasionally to be administered by the stomach tube between meals. Some form of light nourishment is advisable before retiring for the night, and when the patient is troubled with heavy night sweats a good milk punch made with brandy will be found helpful in reviving him.

A cupful of hot water, at a temperature of 140° F. taken in sips half an hour before breakfast, helps to stimulate the appetite and cleanses the stomach.

Diet in grip, bronchitis, pneumonia. During a severe attack of grip, bronchitis, or pneumonia, while the fever lasts, fluids are generally prescribed instead of solid food, choosing the kind that agrees best with the patient, as (especially in pneumonia) the stomach is easily nauseated.

A raw egg taken from the shell will help to soothe the troublesome cough in bronchitis. Hot and cold drinks of various kinds, as already described on page 165, should be given very frequently.

After the temperature declines light diet is usually ordered, as in convalescence from fever, and even after regular meals are established extra nourishment should be taken between times, such as milk punch, eggnog, cocoa, bouillon, or milk, as the system takes some weeks to recover its natural tone.

Diet in tonsilitis. This disease calls especially for fluid diet, as the difficulty with the throat will frequently prevent the patient taking as much nourishment as is required. It is best to concentrate the food as far as possible into the smallest amount of fluid, giving strong beef extracts, beef-juice without being diluted, egg beaten up and milk in various forms.

In tonsilitis, as well as in many fever cases, ice-cream is generally well received by the sufferer, as the intense coldness is grateful to the inflamed throat.

Diet in neuralgia. When suffering from an attack of neuralgia all kinds of rich foods should be eaten: cream, butter, fat meats, plenty of vegetables, eggs, milk, and meat of all kinds, besides nourishment between meals. Tea, coffee, confectionery, or highly seasoned foods are to be avoided.

Diet in surgical cases. Surgical patients ought to be well fed, as wounds heal better and more rapidly when the blood is in good condition; at the same time care must be taken not to overload the system while the patient is confined to bed and unable to take any active exercise. After minor operations, when there are no complications, the ordinary diet is, as a rule, resumed after the first day, with perhaps a little extra nourishment between meals if desired by the patient. When there has been very severe pain, or a great shock, solid food must be returned to very slowly, as the digestion will probably be weak for some little time; and when there has been much loss of blood, a large amount of nourishment is required, which should be given largely in fluid form. In long surgical cases, where there is a constant discharge from a wound, plenty of fresh vegetables, fats, fruits, milk, and the most nourishing food is necessary to replace the continued drain on the system.

Very much the same food that is recommended in convalescence from fevers may be given in the convalescence of surgical patients, but as long as the patient is confined to bed the plainest food should be chosen, and the heartiest meal taken in the middle of the day.

Insomnia. Nervous people who suffer from insomnia could be very much benefited by careful attention to diet, instead of having recourse to hypnotics. It is better not to sleep on an empty stomach, but always take some light food, as cocoa, sandwich, malted milk, or a glass of milk, just before retiring; or it should be at hand to take when they become wakeful during the night. Besides their ordinary meals, they should if possible take some light refreshment every two hours if the digestion is good, omitting tea and coffee altogether, and spending the greater part of the day in the open air.

Diet in rheumatism. Rheumatism is among the dis-

eases especially influenced by diet, in fact, diet forms one of the greatest factors in the treatment of rheumatism, either acute or chronic.

In acute cases of rheumatism a fluid diet is most suitable, such as gruels, vegetable soups, and all forms of milk and cream. No alcohol should be allowed, but plenty of acid drinks, especially lemonade without sugar may be taken. When the acute symptoms subside, all varieties of cereals and farinaceous foods, milk and cream toast, and corn-meal pudding without sugar; and when the regular meals are resumed milk, milk soups, cereals, rice, oysters, eggs, chicken, spinach, celery, and fresh fruits are among some of the best foods to take. Rich jellies, confectionery of all kinds, and meat should be avoided, though in chronic cases meat is usually allowed once a day, while fish and poultry are taken at other meals.

In all cases of rheumatism and gout saccharin should take the place of sugar; being a product of coal-tar, it is without any of the harmful effects of sugar, but supplies the necessary sweet taste.

The gradual accumulation of a large amount of uric acid in the system generally ends in an acute attack of gout, and there are also many people who suffer from chronic gout in a greater or less degree. Whenever it is found in the system, even in a light form, especial attention must be given to diet. Alcoholic drinks of all kinds should be avoided as carefully as sweets and sugar. Fresh vegetables, fruit, with a very small amount of mutton, lamb, or beef once a day only, and some chicken, toast or crackers, should form a large part of the daily food. A stout person with gout in his system has to be so careful of his diet that meal-time is to him a trial rather than a pleasure. Only just sufficient food to sustain the body should be eaten. Eating too much is very harmful; three meals a day, rather slender ones too, at regular intervals, are sufficient, and no eating between

meals should be indulged in. During an acute attack the diet is usually strictly laid out by the physician in charge, with plenty of water, hot or cold, taken about half an hour before meals, weak tea or alkaline drinks, such as lithia water, apollinaris, etc., graham bread or dry toast, farinaceous foods, and some of the plainest broths with no fat or grease in them, cocoa nibs, and a tea or coffee sweetened with saccharin. Shell-fish,— except oysters (which may be eaten when the hard part has been removed),— rich salads, sauces, or pastry must be omitted.

Diet in diabetes. Rich foods of all kinds must be avoided, and the diet depend principally on vegetables, poultry, fish, fruit, etc. Starch and sugar must be avoided.

In an acute attack all food is withheld for two or three days except a small amount of milk. Then a light diet is prescribed. Starchy food of any kind, sugar, beets, turnips, potatoes, white bread, rich sauces and desserts with sugar will have to be cut out entirely from the bill of fare. Saccharin must be used in the place of sugar.

Diet in indigestion, dyspepsia. Slow eating ought to be the rule in all cases of illness, but especially when the trouble is indigestion or dyspepsia, as digestion really commences in the mouth by the proper preparation of the food to be received into the stomach.

The diet must be very plain; all heavy sauces, rich pastries, pickles, entrees, and hot breads, starchy foods, shell-fish except oysters, smoked meats, game, cheese, acid fruits, and tea are left out of the menu.

When the dyspepsia is only slight, a few fresh vegetables and a little starchy food is allowed.

Some of the following dishes are the best that may be taken when suffering from indigestion and dyspepsia: cereals, zwieback, or graham bread, small portion of butter or bacon, well-cooked vegetables in limited quantities, fresh fish without sauce, eggs lightly cooked if they agree

with the patient; oysters, broiled or roast meats and chicken, raw-beef sandwiches, kumyss, baked apples, peaches and oranges, very weak tea without milk or sugar, and postum cereal instead of coffee.

In very severe cases the patient is put on a strict diet with but little variety. Food must be taken very slowly, and fluids are best taken between meals instead of with them. It is wiser not to eat heartily when mentally exhausted, but to take some light nourishment, and to rest for half an hour, as the food will not digest well when the nerves are overtired. All meals should be eaten at regular hours, and if possible, with bright conversation at the table.

Diet in constipation. Chronic constipation may be largely the result of improper feeding, and people with small appetites often suffer with this trouble, especially when very little fluid is taken. Eating hurriedly, taking meals at irregular hours, and especially want of proper exercise all tend to promote constipation. Fruits should be eaten in abundance, as they are laxatives, also spinach, onions, and tomatoes, while potatoes, beans, or peas should be indulged in very sparingly. Tea is also slightly constipating, and too much milk, sweets, fried foods, and eggs. Graham bread, buckwheat cakes, cereals (especially oatmeal, bran, and wheatena) and quantities of water, both with meals and at other times, especially on first arising in the morning, will be of service in curing the trouble.

Diet in diarrhea, dysentery. The opposite kind of treatment is required in cases of diarrhea and dysentery; very little food should be taken, and especially no vegetables or fruits. If possible, no food of any kind taken for the first eight or nine hours during an acute attack; commence then with a little arrowroot or barley-water, boiled milk and rice, followed by chicken broth and crackers, and milk diluted with lime-water.

The return to full diet must be very gradual, starting with milk toast, chicken, and boiled rice, and perhaps a baked potato.

With children, little or no milk should be given, but instead beef-juice, barley gruel, broths freshly made, or scraped beef, avoiding all patent foods or meat extracts. The nourishment should be administered in small quantities about every two hours, so that the stomach may not be overcrowded.

When diarrhea turns to dysentery a most careful diet must be followed; milk, if given, should be sterilized or peptonized; beef-juice or scraped beef is serviceable.

During convalescence the patient may take rare roast beef, broiled chicken, dry toast, and a little fish if desired. Very small amounts of fluid should be taken, and all drinking water must be carefully sterilized.

CHAPTER XII

RECIPES FOR INVALID COOKING

Broths. Broths for sick people must be entirely free from the slightest appearance of grease. When possible, they should be made the day before they are used, and allowed to stand in a cool place all night; then the grease will rise to the surface and can be easily skimmed off before the broth is heated. If, however, there is the slightest appearance of grease after the broth is heated, run a crust of bread, or better still a piece of coarse blotting paper, over the top two or three times, and it will disappear.

Chicken broths. To make chicken broth nicely, take an old chicken, clean it thoroughly, cut it in rather small pieces, and put it in a deep sauce-pan covered with water; let it boil slowly for four or five hours, renewing the water, if necessary. Then strain and set it aside over night; it ought to be formed into a thick jelly in the morning, and will keep for days. A little rice or barley, boiled very soft, added to the chicken broth, makes a nice variety.

Beef tea. The best way to cook beef tea is in a bottle. Cut up a pound of beef into small square pieces; put them in a preserve bottle, and add two cups of cold water; stand the bottle on a saucer in a sauce-pan of hot water and let it come almost to a boil. After remaining there about four hours it will be ready for use, and when well seasoned is very good.

Mutton broth. Mutton broth ought to be cooked for four or five hours, and the grease should be most carefully removed before serving, as otherwise it is too rich.

Calf's-foot broth. Cut up two calves' feet and put

them in a saucepan with four pints of water, a little carrot, a few celery leaves, salt and mace. Boil for three hours very slowly until half the amount is boiled away, then strain, and if desired add additional seasoning.

Beef juice. Beef juice is one of the most useful forms of nourishment in times of illness, when the stomach is delicate, and the patient weak and without appetite. A thick, juicy steak is needed to prepare the beef juice. Cut the meat into pieces about two or three inches square; warm it for a moment over the fire; then squeeze it into a glass with the lemon-squeezer (if you do not have a meat juice squeezer). About two ounces may be given at one time. When you have squeezed it, stand the glass in a cup of boiling water and let it heat slowly. Watch it carefully; for if it is allowed to get too hot the beef juice will coagulate and spoil. Add plenty of salt and pepper, and, if necessary, a little hot water. Sometimes the beef juice can be taken better when cold; in that case, add some small pieces of cracked ice. All children are fond of beef juice, and will often take it when nothing else pleases them.

Biscuit soup. Take a large cupful of mutton broth or beef-tea and two heaping teaspoonfuls of powdered biscuit; boil them together for fifteen minutes, stirring constantly; strain and serve hot with small pieces of dry toast.

Chicken pureé. Take the white meat from the breast of a nicely roasted chicken, and a large tablespoonful of stale milk-bread crumbs. Pound the bread and meat together, mixing in a little chicken broth to moisten it to the consistency of thick cream, flavor to taste, warm slowly and serve in a small bouillon cup.

Oyster stew. Mix half a pint of milk with a teaspoonful of corn flour, boil until it thickens, stirring constantly. To this add half an ounce of butter and season to taste. Then throw in six or eight oysters and stew gently for twenty minutes. Serve on a hot dish with some small

pieces of bread (that have been soaked in lemon juice and toasted) surrounding the oysters.

Sago soup. Cook two tablespoonfuls of sago in one cup of water until quite soft, then add the yolk of an egg and half a cup of hot cream. Have ready a pint of beef essence boiling hot and mix all well together.

Oatmeal beef-tea. Make about a quart of good beef-tea; after straining add to it half a cupful of fine oatmeal which has been mixed to a paste with water, and season to taste. Boil until the oatmeal is soft, then strain and serve either hot or cold.

Meat Soup. Take half a pound of mutton, veal and beef, cut up into small pieces; put it into a saucepan with one pint and a half of water, and a little salt. Allow it to stew slowly for three hours; skim frequently; if desired, parsley, celery, salt, or other seasoning may be added.

Panada. Wash well two ounces of pearl barley or rice, put it into a saucepan with half a pound of mutton or veal cut in small pieces, and a half a pint of water. Allow it to simmer slowly for two hours; then pound it up and pass it through a fine sieve, add a little cream, and serve hot or cold.

Milk preparations. Milk is considered the most perfect food in illness, as it contains all the necessary ingredients to sustain life. It can be given in many different forms, viz., diluted with lime-water or vichy, boiled, sterilized, peptonized, or in one of the prepared forms, as matzoon, kumyss, somal, malted milk, or buttermilk.

When peptonizing milk, use the little tubes of peptonizing powder, and follow the directions carefully, do not prepare more than a pint at a time, as, if allowed to stand any length of time, it becomes bitter and unpleasant to the taste.

Thick milk. This is easily digested and very palatable. Put a quart of milk away in a cool place in a wide bowl until it becomes thick and smooth like jelly, then set it on

the ice for half an hour, and serve it in a glass saucer with cream, sugar, and grated nutmeg.

Kumyss. A quart bottle is filled almost to the top with boiled milk; then stand it aside until lukewarm; add to it a small piece of yeast about the size of a nutmeg and a tablespoonful of sugar. Seal tightly and stand in a cool, dark place, shake daily, and do not use for a week.

Sterilized milk. When there is no regular sterilizer on hand in a private house, and it is necessary to sterilize the milk, put it in small bottles which have previously been scalded, and use absorbent cotton for corks. Then place the bottles in a saucepan, half-filled with water, standing them on a brick or a plate turned upside down in the bottom of the saucepan, cover over tightly, and let them steam slowly for two hours; then put the bottles in a cool place, and do not uncork them until you are ready to use the milk.

Milk punch. Milk punch is very refreshing between meals, and is made with three-quarters of a glass of milk, half a teaspoonful of sugar, and two teaspoonfuls of whiskey, also some cracked ice. When there is no milk-shaker on hand, put all the ingredients into a glass and cover with another one of the same size; then shake up and down until quite frothy.

Eggnog. Take one egg, a tablespoonful of sherry, half a glass of milk, and sugar to taste. Beat the white and yolk separately, and keep out a little of the white for the top. A little nutmeg grated on the top is an addition. When wine is not required a few drops of vanilla essence will flavor the eggnog.

Orange and vichy. A delicious drink can be made from the juice of two oranges or a lemon, with half a glass of vichy or soda water, and some ice. This is especially refreshing during the summer.

If your patient awakes in the morning with a disagreeable taste in his mouth, the juice of an orange before

breakfast is most refreshing, and is also a help in keeping the bowels in order. The juice of grape-fruit, with sugar and ice, is also delicious.

Barley water. Take four tablespoonfuls of pearl barley, well washed; put in a saucepan and add three cupfuls of water, boil for about twenty-five minutes, sweeten and flavor to taste.

Grape juice. This recipe is a very simple one and may easily be prepared at home.

The grapes must be fresh and perfectly ripe, and about three cupfuls of water is allowed to every quart of grapes. Go over the grapes carefully, picking off the crushed ones and the stems. Put the grapes on the fire, pour the water over them and allow them to come to a boil very slowly; as soon as they come to the boil, take off the fire and strain through a cloth, then put the juice back on the fire, allow it to come to the boiling point, pour into the bottles and cork tightly. Self-sealing jars or bottles with a patent top should be used. They must be kept in a dark, cool place.

Gruel barley. Take one tablespoonful of barley, well mixed with half a cup of cold water; add to it a little salt and a cupful of boiling water. Cook for ten minutes and then add three-quarters of a cup of hot milk, sweeten to taste, and serve immediately.

Gruel of milk peptonized. Take a cupful of rice, oatmeal, or barley gruel; warm it on the fire; then to half a pint of cold milk add five grains of pancreatic extract and fifteen grains of soda, mix well together and throw it into the gruel, take off the fire and serve when cold.

Irish moss or carrageen. Take half a cupful of the moss, wash it well and let it soak for a little while in cold water; then pour off the water and add to it a pint and a half of fresh water, let it boil for a quarter of an hour, then strain and add flavoring and sugar to taste. When cold it will be formed into a jelly. If it is preferred as a drink, add double the quantity of water or milk.

Gruel, oatmeal. Take four tablespoonfuls of oatmeal mixed with double the quantity of cold water. Put a pint of water in a saucepan with a pinch of salt, let it come to the boil, then stir in the oatmeal; boil slowly for twenty minutes, strain and serve.

Arrowroot gruel. Take a tablespoonful of arrowroot mixed to the consistency of thick cream; boil a cupful of milk and stir in the arrowroot, let it boil for five minutes, sweeten to taste. Just after taking it off the fire pour in half a cupful of cream.

Gruel of rice. The same proportions are used as in making oatmeal gruel, water or milk may be used in mixing; and this kind of gruel is of especial service in cases of dysentery.

Coffee. To make a good cup of coffee for an invalid put about eight teaspoonfuls of coffee (Java and Mocha mixed is the best) into a granite coffee-pot, and pour on it a large cupful of boiling water; then place it on the stove until it comes to the point of boiling, pour in a second cup of boiling water, allow it to come to almost boiling point again, then stand it aside to settle, and serve immediately with cream.

Tea for invalids. The water must be freshly boiled, and on the boil, when the tea is made. An earthenware tea-pot is the best to use; first scald it with the boiling water before putting in the tea (a very important point to observe). The amount of tea varies according to the quality; as a rule, one teaspoonful for each cup, and if more than three cups are made an extra spoonful is allowed. After pouring on the water the tea should only stand for three minutes. Serve on a tray covered with a snowy napkin, with a dainty cup and saucer, tiny cream pitcher, sugar bowl, and small pitcher of hot water. Put some of the boiling water in the cup to heat it, and allow the patient to pour it out herself.

Poached eggs. When poaching eggs for invalids use

a tablespoonful of sherry to stiff froth, and mix it well with the lemon and water.

Gruel egg. Beat up the whites of three eggs to a stiff froth and stir them into a cupful of fresh barley gruel, allow it to stand on the fire a few minutes without boiling, then add any flavoring desired. Turn it into a mold, serve cold with cream.

Wine whey. Wine whey makes a delicate little supper dish, with half a cup of milk and three ounces of sherry. Scald the milk, add the wine, take right off the fire, put on the ice to get cold, and sweeten to taste.

Beef tea jelly. A third of a box of gelatin is steeped in water for about an hour. Pour over it two cups of boiling hot beef-tea, season to taste, cool in small cups. Serve with toasted crackers.

Chicken jelly. Take a young chicken nicely prepared, cut up into small pieces, put in a saucepan with three pints of water, cook rather slowly, removing the grease from the top continually. Allow it to cook for about five and a half hours, season to taste with salt, pepper, celery, and parsley; when finished stand aside to cool, for some hours, then skim the grease off the top and serve either hot or cold.

Arrowroot jelly. Take a dessertspoonful of arrowroot, a little nutmeg, sugar, and half a pint of water. Mix the arrowroot with a little cold water, add the remainder of the water boiling hot, stir briskly until it comes to the boil, strain into a bowl and place on the ice to cool.

Jelly made with prepared milk. Soak half a box of gelatin for an hour in cold water, add to it two ounces of boiling water, the juice of an orange and lemon, and a little lemon peel, also two ounces of rum. When all is well mixed together pour in a cupful of peptonized milk very hot, sweeten to taste and strain into a mold.

Jelly of fresh fruit. Take a large cupful of clear, sweet jelly, some ripe fruit (any variety you prefer); wash the

fruit and pick it over carefully, removing the skin, and cut it up into small pieces.

Put a little jelly at the bottom of a bowl; when it is cool arrange the fruit around the sides of the mold, then pour in some more jelly; allow it to stand a little, and add some more fruit. Fill up the mold with jelly and fruit in layers, then set it on the ice until cold.

Sago jelly. Have a cupful of the fruit of raspberries, or strawberries, or any other fresh fruit, three-quarters of a cup of sago that has been washed and steeped in water, and a cupful of sugar; boil all well together until the sago is soft, pour into a mold, and set on the ice to cool.

Lemon jelly. Take a cupful of sugar, the juice and rind of two lemons, one pint of water, and one ounce of isinglass. Boil for fifteen minutes, strain through a jelly bag into a mold, and place it on the ice to cool.

Gelatin-blanc-mange. Add three tablespoonfuls of gelatin to a quart of new milk, boil until all is dissolved; then pour in a cupful of cream, sugar to taste and any flavoring desired, stir for five minutes on the stove, then throw in the sugar and nutmeg and a little lemon if desired, pour into a mold and set on the ice to cool.

Lemon sherbet. Take the juice of five lemons, three-quarters of a cup of sugar, and a pint of water all well mixed together; strain and freeze solid on the ice.

Arrowroot blanc-mange. Mix two ounces of arrowroot into a smooth paste with a little milk, sweeten to taste, then boil in a covered saucepan until fairly thick, stirring constantly to prevent burning, season with vanilla, or lemon peel, turn into a mold, and serve ice cold with a little jelly.

Rennet custard. Take one quart of milk, two tablespoonfuls of sugar and flavoring to taste; into this stir a teaspoonful of rennet, cover and stand in a warm room. If it does not commence to thicken in an hour, add a little more rennet. Serve with whipped cream.

that have been stewed and passed through a large strainer, sugar to taste. Cook in a quick oven, in small custard cups.

Meat, minced. Heat four tablespoonfuls of minced meat with a little hot water, salt and pepper, and other seasoning if desired. Add to it one ounce of fine bread crumbs, mix well together, and bake in a buttered dish for eight minutes or until brown on the top.

Sweetbreads, baked. Prepare the sweetbreads carefully, then dip them in a mixture of cracker crumbs and egg; cook slowly for nearly an hour on a pan with plenty of melted butter poured over them; the oven should be pretty hot, and they should be turned frequently.

Croutons. Croutons make a nice addition to soups or broths for an invalid. To make them, take some slices of bread, rather stale, cut them up into small diamond-shaped or square pieces, put them on a tin plate in the oven until quite dry and crispy, then spread them on a broiler over the fire and toast quite brown; should be served in the soup as soon as toasted and not allowed to stand.

Oatmeal pudding. Two large apples are sliced into a bowl, then add half an ounce of flour and half a pint of oatmeal, which has been steeped for three hours, a pint of water, sugar and salt to taste. Bake in a quick oven, and serve hot with cream.

Rice cake. Beat up three eggs to a stiff froth, put them in a double boiler, and stir briskly on the stove for eight minutes, then add slowly three ounces of fine sugar and a quarter of a cup of ground rice, also flavoring to taste. When all is well mixed, pour into a buttered pan and bake in a hot oven for twenty minutes.

Beef juice on toast. Take three or four ounces of freshly squeezed beef-juice, add pepper and salt to taste, warm it by putting the cup in a bowl of very hot water, then make two slices of buttered toast, about half an inch

thick, put the toast on a hot plate, and pour the hot beef-juice over it, serve at once.

Rice cookies. Take half a cupful of rice nicely boiled, one egg, a teaspoonful of butter, and half a cup of milk, add to this three tablespoonfuls of rice flour and a pinch of salt, mix all well together and bake in small tins.

Chicken creamed. A tender young chicken is cut up in rather small pieces and placed in a saucepan, add to it two pints of hot water, two tablespoonfuls of butter, part of an onion, pepper and salt, and if desired a little lemon juice. Boil all together until the chicken is quite tender, cooking very slowly. While the chicken is in preparation the sauce may be made. Take four teaspoonfuls of flour and the same amount of butter, put in a small saucepan on the fire, rubbing them well together until the butter is dissolved, then add to it the yolk of an egg well beaten up and a tablespoonful of cream. When all is well mixed together strain, and laying the chicken on a hot plate, pour the cream over it, surrounding the chicken with some nicely boiled rice or mashed potatoes.

Scraped beef. Scraped beef either made into a sandwich or served on toast is very nourishing and easily digested. Scrape the beef finely, and brown for a second on a tin plate over the fire, season nicely, and spread it between slices of thin bread and butter, toasted crackers, or on toast. Another method is to put the scraped beef between two thin slices of stale bread, and toast it between a fine wire broiler. The heat makes the bread nice and crisp, and sends the juice of the meat into it; don't cook it too much; a little butter may be added if desired. It can also be made into the form of a ball, by the addition of the white of an egg well beaten to hold it together. Scraped beef is often ordered raw, and when scraped very finely, with plenty of pepper and salt, and placed between thin bread and butter, it is easy to take, and is very nourishing.

Dietetics for Nurses

By Fairfax T. Proudfit,

Formerly Instructor of Nurses in the Lucy Brinkly Hospital, Memphis, Tenn.

Outside of Materia Medica and Anatomy and Physiology, probably few subjects in the training of pupil nurses are of such importance as are Dietetics and Nutrition, which have, however, suffered greatly for an adequate text up to this time. The former mistaken view, that Dietetics begins and ends in the diet kitchen, is probably responsible for this lack, but in this text the author has placed the food preparation in the probationer's curriculum, where she gives a comprehensive study of the food materials with which the nurse comes constantly in contact. The entire subject matter of this book is presented in the simplest language possible and in a form which is both interesting and scientifically correct.

The book is divided into three sections: First, Preliminary or Probationer's Dietetics, covering the first months of training before entering into the work of the hospital proper; Second, Junior Dietetics, in which the chemistry of foods and nutrition are given; and, Third, Senior Dietetics, which includes the study of all diseases affected by diet, or those which are the result of errors in diet at some period of life. While the last named is the most interesting, the nurse must have a first hand knowledge of food materials and their relation to the normal body before undertaking it.

It is hoped that this book will enable the training schools to give the subjects of Diet and Nutrition the attention they deserve, making them a part of the regular curriculum with a direct appeal to the interest of the pupil nurse.

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By DIANA C. KIMBER

Formerly Assistant Superintendent New York City Training School for Nurses, Blackwell's Island, New York. New Fifth Edition completely revised by CAROLYN E. GRAY, R.N., Superintendent of the Training School for Nurses, City Hospital, New York.

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After twenty-five years of use by many thousands of pupil nurses, who have come to look upon it as the foundation of their training school work, this book celebrates its Quarter Centenary notably in two ways: first, through *its adoption by the Army Training School for Nurses*, and hence its endorsement by the Surgeon General of the Army as the ablest help in stress of war as in peace; and, secondly, by the publication of the New Fifth Edition which has been entirely revised and reset.

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